

TO THE

RIGHT HONOURABLE

T H O M A S,

EARL OF PEMBROKE AND MONTGOMERY,

Baron Herbert of Cardiff, Lord Ross of Kendal, Par, Fitzhugh, Marmion, St. Quintin, and Shurland ; Lord President of his Majesty's Most Honourable Privy Council, and Lord Lieutenant of the County of Wilts, and of South-Wales.

MY LORD,

THIS Treatise, which is grown up under your lordship's eye, and has ventured into the world by your order, does now, by a natural kind of right, come to your lordship for that protection, which you several years since promised it. It is not that I think any name, how great soever, set at the beginning of a book, will be able to cover the faults that are to be found in it. Things in print must stand and fall by their own worth, or the Reader's fancy. But there being nothing more to be desired for truth, than a fair unprejudiced hearing, nobody is more likely to procure me that than your lordship, who are allowed to have got so intimate an acquaintance with her, in her more retired recesses. Your lordship is known to have so far advanced your speculations in the most abstract and general knowledge of things, beyond the ordinary reach, or

The Epistle Dedicatory.

common methods, that your allowance and approbation of the design of this treatise, will at least preserve it from being condemned without reading; and will prevail to have those parts a little weighed, which might otherwise, perhaps, be thought to deserve no consideration, for being somewhat out of the common road. The imputation of novelty is a terrible charge amongst those who judge of men's heads, as they do of their perukes, by the fashion; and can allow none to be right, but the received doctrines. Truth scarce ever yet carried it by vote any where at its first appearance: new opinions are always suspected, and usually opposed, without any other reason, but because they are not already common. But truth, like gold, is not the less so for being newly brought out of the mine. It is trial and examination must give it price, and not an antique fashion: and though it be not yet current by the public stamp; yet it may, for all that, be as old as nature, and is certainly not the less genuine. Your lordship can give great and convincing instances of this, whenever you please to oblige the public with some of those large and comprehensive discoveries you have made of truths hitherto unknown, unless to some few, from whom your lordship has been pleased not wholly to conceal them. This alone were a sufficient reason, were there no other, why I should dedicate this Essay to your lordship; and its having some little correspondence with some parts of that nobler and vast system of the sciences your lordship has made so new, exact, and instructive a draught of, I think it glory enough, if your lordship permit me to boast, that here and there I have fallen into some thoughts not

The Epistle Dedicatory.

wholly different from yours. If your lordship think fit, that, by your encouragement, this should appear in the world, I hope it may be a reason, some time or other, to lead your lordship farther ; and you will allow me to say, that you here give the world an earnest of something, that, if they can bear with this, will be truly worth their expectation. This, my lord, shows what a present I here make to your lordship ; just such as the poor man does to his rich and great neighbour, by whom the basket of flowers or fruit is not ill taken, though he has more plenty of his own growth, and in much greater perfection. Worthless things receive a value, when they are made the offerings of respect, esteem, and gratitude ; these you have given me so mighty and peculiar reasons to have, in the highest degree, for your lordship, that if they can add a price to what they go along with, proportionable to their own greatness, I can with confidence brag, I here make your lordship the richest present you ever received. This I am sure, I am under the greatest obligations to seek all occasions to acknowledge a long train of favours I have received from your lordship ; favours, though great and important in themselves, yet made much more so by the forwardness, concern, and kindness, and other obliging circumstances, that never failed to accompany them. To all this, you are pleased to add that which gives yet more weight and relish to all the rest : you vouchsafe to continue me in some degrees of your esteem, and allow me a place in your good thoughts ; I had almost said friendship. This, my lord, your words and actions so constantly show on all occasions,

The Epistle Dedicatory.

even to others when I am absent, that it is not vanity in me to mention what every body knows: but it would be want of good manners, not to acknowledge what so many are witnesses of, and every day tell me, I am indebted to your lordship for. I wish they could as easily assist my gratitude, as they convince me of the great and growing engagements it has to your lordship. This I am sure, I should write of the understanding without having any, if I were not extremely sensible of them, and did not lay hold on this opportunity to testify to the world, how much I am obliged to be, and how much I am,

My LORD,

Your Lordship's

Most humble, and

Most obedient servant,

*Dorset-Court, 24th
of May, 1689.*

JOHN LOCKE.

THE
EPISTLE

TO THE

R E A D E R.

READER,

I HERE put into thy hands, what has been the diversion of some of my idle and heavy hours : if it has the good luck to prove so of any of thine, and thou hast but half so much pleasure in reading, as I had in writing it, thou wilt as little think thy money, as I do my pains, ill bestowed. Mistake not this, for a commendation of my work ; nor conclude, because I was pleased with the doing of it, that therefore I am fondly taken with it now it is done. He that hawks at larks and sparrows, has no less sport, though a much less considerable quarry, than he that flies at nobler game : and he is little acquainted with the subject of this treatise, the UNDERSTANDING, who does not know, that as it is the most elevated faculty of the soul, so it is employed with a greater and more constant delight than any of the other. Its searches after truth, are a sort of hawking and hunting, wherein the very pursuit makes a great part of the pleasure. Every step the mind takes in its progress towards knowledge, makes some discovery, which is not only new, but the best too, for the time at least.

For the understanding, like the eye, judging of objects only by its own sight, cannot but be pleased with what it discovers, having less regret for what has escaped it, because it is unknown. Thus he who has raised

The Epistle to the Reader.

himself above the alms-basket, and not content to live lazily on scraps of begged opinions, sets his own thoughts on work, to find and follow truth, will (whatever he lights on) not miss the hunter's satisfaction; every moment of his pursuit will reward his pains with some delight, and he will have reason to think his time not ill-spent, even when he cannot much boast of any great acquisition.

This, Reader, is the entertainment of those who let loose their own thoughts, and follow them in writing; which thou oughtest not to envy them, since they afford thee an opportunity of the like diversion, if thou wilt make use of thy own thoughts in reading. It is to them, if they are thy own, that I refer myself: but if they are taken upon trust from others, it is no great matter what they are, they not following truth, but some meaner consideration; and it is not worth while to be concerned, what he says or thinks, who says or thinks only as he is directed by another. If thou judgest for thyself, I know thou wilt judge candidly; and then I shall not be harmed or offended, whatever be thy censure. For though it be certain, that there is nothing in this treatise, of the truth whereof I am not fully persuaded; yet I consider myself as liable to mistakes, as I can think thee, and know that this book must stand or fall with thee, not by any opinion I have of it, but thy own. If thou findest little in it new or instructive to thee, thou art not to blame me for it. It was not meant for those that had already mastered this subject, and made a thorough acquaintance with their own understandings; but for my own information, and the satisfaction of a few friends, who acknowledged themselves not to have sufficiently considered it. Were it fit to trouble thee with the history of this Essay, I should tell thee, that five or six friends meeting at my chamber, and discoursing on a subject very remote from this, found themselves quickly at a stand, by the difficulties that rose on every side. After we had a while puzzled ourselves, without coming any nearer a resolution of those doubts which perplexed us, it came into my thoughts, that we took a wrong course; and

The Epistle to the Reader.

that before we set ourselves upon inquiries of that nature, it was necessary to examine our own abilities, and see what objects our understandings were, or were not, fitted to deal with. This I proposed to the company, who all readily assented; and thereupon it was agreed, that this should be our first inquiry. Some hasty and undigested thoughts on a subject I had never before considered, which I set down against our next meeting, gave the first entrance into this discourse; which having been thus begun by chance, was continued by intreaty; written by incoherent parcels; and after long intervals of neglect, resumed again, as my humour or occasions permitted; and at last, in a retirement, where an attendance on my health gave me leisure, it was brought into that order than now seest it.

This discontinued way of writing may have occasioned, besides others, two contrary faults, viz. that too little and too much may be said in it. If thou findest any thing wanting, I shall be glad, that what I have writ gives thee any desire, that I should have gone farther: if it seems too much to thee, thou must blame the subject; for when I put pen to paper, I thought all I should have to say on this matter, would have been contained in one sheet of paper, but the farther I went, the larger prospect I had; new discoveries led me still on, and so it grew insensibly to the bulk it now appears in. I will not deny, but possibly it might be reduced to a narrower compass than it is; and that some parts of it might be contracted; the way it has been writ in, by catches, and many long intervals of interruption, being apt to cause some repetitions. But to confess the truth, I am now too lazy, or too busy to make it shorter.

I am not ignorant how little I herein consult my own reputation, when I knowingly let it go with a fault, so apt to disgust the most judicious, who are always the nicest readers. But they who know sloth is apt to content itself with any excuse, will pardon me, if mine has prevailed on me, where, I think, I have a very good one. I will not therefore allege in my defence, that the same notion, having different respects, may

The Epistle to the Reader.

be convenient or necessary to prove or illustrate several parts of the same discourse; and that so it has happened in many parts of this: but waving that, I shall frankly avow, that I have sometimes dwelt long upon the same argument, and expressed it different ways, with a quite different design. I pretend not to publish this Essay for the information of men of large thoughts, and quick apprehensions; to such masters of knowledge, I profess myself a scholar, and therefore warn them beforehand not to expect any thing here, but what, being spun out of my own coarse thoughts, is fitted to men of my own size; to whom, perhaps, it will not be unacceptable, that I have taken some pains to make plain and familiar to their thoughts some truths, which established prejudice, or the abstractedness of the ideas themselves, might render difficult. Some objects had need be turned on every side: and when the notion is new, as I confess some of these are to me, or out of the ordinary road, as I suspect they will appear to others; it is not one simple view of it, that will gain it admittance into every understanding, or fix it there with a clear and lasting impression. There are few, I believe, who have not observed in themselves or others, that what in one way of proposing was very obscure, another way of expressing it has made very clear and intelligible; though afterward the mind found little difference in the phrases, and wondered why one failed to be understood more than the other. But every thing does not hit alike upon every man's imagination. We have our understandings no less different than our palates; and he that thinks the same truth shall be equally relished by every one in the same dress, may as well hope to feast every one with the same sort of cookery: the meat may be the same, and the nourishment good, yet every one not be able to receive it with that seasoning: and it must be dressed another way, if you will have it go down with some, even of strong constitutions. The truth is, those who advised me to publish it, advised me, for this reason, to publish it as it is; and since I have been brought to let it go abroad, I desire it should be understood by whoever

The Epistle to the Reader.

gives himself the pains to read it ; I have so little affection to be in print, that if I were not flattered this Essay might be of some use to others, as I think it has been to me, I should have confined it to the view of some friends, who gave the first occasion to it. My appearing therefore in print, being on purpose to be as useful as I may, I think it necessary to make what I have to say, as easy and intelligible to all sorts of readers, as I can. And I had much rather the speculative and quick-sighted should complain of my being in some parts tedious, than that any one, not accustomed to abstract speculations, or prepossessed with different notions, should mistake, or not comprehend my meaning.

It will possibly be censured as a great piece of vanity or insolence in me, to pretend to instruct this our knowing age ; it amounting to little less, when I own, that I publish this Essay with hopes it may be useful to others. But if it may be permitted to speak freely of those, who with a feigned modesty condemn as useless, what they themselves write, methinks it savours much more of vanity or insolence, to publish a book for any other end ; and he fails very much of that respect he owes the public, who prints, and consequently expects men should read that, wherein he intends not they should meet with any thing of use to themselves or others : and should nothing else be found allowable in this treatise, yet my design will not cease to be so ; and the goodness of my intention ought to be some excuse for the worthlessness of my present. It is that chiefly which secures me from the fear of censure, which I expect not to escape more than better writers. Men's principles, notions, and relishes are so different, that it is hard to find a book which pleases or displeases all men. I acknowledge the age we live in is not the least knowing, and therefore not the most easy to be satisfied. If I have not the good luck to please, yet nobody ought to be offended with me. I plainly tell all my readers, except half a dozen, this treatise was not at first intended for them ; and therefore they need not be at the trouble to be of that number. But yet

The Epistle to the Reader.

if any one thinks fit to be angry, and rail at it, he may do it securely: for I shall find some better way of spending my time, than in such kind of conversation. I shall always have the satisfaction to have aimed sincerely at truth and usefulness, though in one of the meanest ways. The commonwealth of learning is not at this time without master-builders, whose mighty designs in advancing the sciences, will leave lasting monuments to the admiration of posterity; but every one must not hope to be a Boyle, or a Sydenham; and in an age that produces such masters, as the great—Huygenius, and the incomparable Mr. Newton, with some others of that strain; it is ambition enough to be employed as an under-labourer in clearing the ground a little, and removing some of the rubbish that lies in the way to knowledge; which certainly had been very much more advanced in the world, if the endeavours of ingenious and industrious men had not been much cumbered with the learned but frivolous use of uncouth, affected, or unintelligible terms, introduced into the sciences, and there made an art of, to that degree, that philosophy, which is nothing but the true knowledge of things, was thought unfit, or incapable to be brought into well-bred company, and polite conversation. Vague and insignificant forms of speech, and abuse of language, have so long passed for mysteries of science; and hard and misapplied words, with little or no meaning, have, by prescription, such a right to be mistaken for deep learning, and height of speculation, that it will not be easy to persuade, either those who speak, or those who hear them, that they are but the covers of ignorance, and hindrance of true knowledge. To break in upon the sanctuary of vanity and ignorance, will be, I suppose, some service to human understanding: though so few are apt to think they deceive or are deceived in the use of words; or that the language of the sect they are of, has any faults in it which ought to be examined or corrected; that I hope I shall be pardoned, if I have in the third book dwelt long on this subject, and endeavoured to make it so plain, that neither the inve-

The Epistle to the Reader.

terateness of the mischief, nor the prevalence of the fashion, shall be any excuse for those, who will not take care about the meaning of their own words, and will not suffer the significancy of their expressions to be inquired into.

I have been told, that a short epitome of this treatise, which was printed 1688, was by some condemned without reading, because innate ideas were denied in it; they too hastily concluding, that if innate ideas were not supposed, there would be little left, either of the notion or proof of spirits. If any one take the like offence at the entrance of this treatise, I shall desire him to read it through; and then I hope he will be convinced, that the taking away false foundations, is not to the prejudice, but advantage of truth; which is never injured or endangered so much, as when mixed with, or built on falsehood. In the second edition, I added as followeth:

The bookseller will not forgive me, if I say nothing of this second edition, which he has promised, by the correctness of it, shall make amends for the many faults committed in the former. He desires too, that it should be known, that it has one whole new chapter concerning identity, and many additions and amendments in other places. These I must inform my reader are not all new matter, but most of them either farther confirmations of what I had said, or explications, to prevent others being mistaken in the sense of what was formerly printed, and not any variation in me from it; I must only except the alterations I have made in Book II. Chap. 21.

What I had there writ concerning liberty and the will, I thought deserved as accurate a view, as I was capable of; those subjects having in all ages exercised the learned part of the world, with questions and difficulties, that have not a little perplexed morality and divinity; those parts of knowledge, that men are most concerned to be clear in. Upon a closer inspection into the working of men's minds, and a stricter examination of those motives and views they are turned by, I have found reason somewhat to alter the thoughts

The Epistle to the Reader.

I formerly had concerning that, which gives the last determination to the will in all voluntary actions. This I cannot forbear to acknowledge to the world with as much freedom and readiness, as I at first published what then seemed to me to be right; thinking myself more concerned to quit and renounce any opinion of my own, than oppose that of another, when truth appears against it. For it is truth alone I seek, and that will always be welcome to me, when or from whence soever it comes.

But what forwardness soever I have to resign any opinion I have, or to recede from any thing I have writ, upon the first evidence of any error in it; yet this I must own, that I have not had the good luck to receive any light from those exceptions I have met with in print against any part of my book; nor have, from any thing that has been urged against it, found reason to alter my sense, in any of the points that have been questioned. Whether the subject I have in hand requires often more thought and attention than cursory readers, at least such as are prepossessed, are willing to allow: or, whether any obscurity in my expressions casts a cloud over it, and these notions are made difficult to others apprehensions in my way of treating them: so it is, that my meaning, I find, is often mistaken, and I have not the good luck to be every where rightly understood. There are so many instances of this, that I think it justice to my reader and myself, to conclude, that either my book is plainly enough written to be rightly understood by those who peruse it with that attention and indifferency, which every one, who will give himself the pains to read, ought to employ in reading; or else, that I have writ mine so obscurely, that it is in vain to go about to mend it. Which ever of these be the truth, it is myself only am affected thereby, and therefore I shall be far from troubling my reader with what I think might be said, in answer to those several objections I have met with, to passages here and there of my book: since I persuade myself, that he who thinks them of moment enough to be concerned whether they are true or false, will be able to

The Epistle to the Reader.

see, that what is said, is either not well founded, or else not contrary to my doctrine, when I and my opposer come both to be well understood.

If any, careful that none of their good thoughts should be lost, have published their censures of my Essay, with this honour done to it, that they will not suffer it to be an Essay; I leave it to the public to value the obligation they have to their critical pens, and shall not waste my reader's time in so idle or ill-natured an employment of mine, as to lessen the satisfaction any one has in himself, or gives to others, in so hasty a confutation of what I have written.

The booksellers preparing for the fourth edition of my Essay, gave me notice of it, that I might, if I had leisure, make any additions or alterations I should think fit. Whereupon I thought it convenient to advertise the reader, that besides several corrections I had made here and there, there was one alteration which it was necessary to mention, because it ran through the whole book, and is of consequence to be rightly understood. What I thereupon said was this:

Clear and distinct ideas are terms, which, though familiar and frequent in men's mouths, I have reason to think every one who uses, does not perfectly understand. And possibly it is but here and there one, who gives himself the trouble to consider them so far as to know what he himself or others precisely mean by them: I have therefore in most places chose to put determinate or determined, instead of clear and distinct, as more likely to direct men's thoughts to my meaning in this matter. By those denominations, I mean some object in the mind, and consequently determined, i. e. such as it is there seen and perceived to be. This, I think, may fitly be called a determinate or determined idea, when such as it is at any time objectively in the mind, and so determined there, it is annexed, and without variation determined to a name or articulate sound, which is to be steadily the sign of that very same object of the mind, or determinate idea.

To explain this a little more particularly. By determinate, when applied to a simple idea, I mean that

The Epistle to the Reader.

simple appearance which the mind has in its view, or perceives in itself, when that idea is said to be in it: by determinate, when applied to a complex idea, I mean such an one as consists of a determinate number of certain simple or less complex ideas, joined in such a proportion and situation, as the mind has before its view, and sees in itself, when that idea is present in it, or should be present in it, when a man gives a name to it: I say, should be; because it is not every one, not perhaps any one, who is so careful of his language, as to use no word, till he views in his mind the precise determined idea, which he resolves to make it the sign of. The want of this is the cause of no small obscurity and confusion in men's thoughts and discourses.

I know there are not words enough in any language, to answer all the variety of ideas that enter into men's discourses and reasonings. But this hinders not, but that when any one uses any term, he may have in his mind a determined idea, which he makes it the sign of, and to which he should keep it steadily annexed, during that present discourse. Where he does not, or cannot do this, he in vain pretends to clear or distinct ideas: it is plain his are not so; and therefore there can be expected nothing but obscurity and confusion, where such terms are made use of, which have not such a precise determination.

Upon this ground I have thought determined ideas a way of speaking less liable to mistakes, than clear and distinct: and where men have got such determined ideas of all that they reason, inquire, or argue about, they will find a great part of their doubts and disputes at an end. The greatest part of the questions and controversies that perplex mankind, depending on the doubtful and uncertain use of words, or (which is the same) indetermined ideas, which they are made to stand for; I have made choice of these terms to signify, 1. Some immediate object of the mind, which it perceives and has before it, distinct from the sound it uses as a sign of it. 2. That this idea, thus determined, i. e. which the mind has in itself, and knows, and sees there,

OF

HUMAN UNDERSTANDING.

BOOK I. CHAP. I.

Introduction.

§ 1. SINCE it is the understanding, that sets man above the rest of sensible beings, and gives him all the advantage and dominion, which he has over them; it is certainly a subject, even for its nobleness, worth our labour to inquire into. The understanding, like the eye, whilst it makes us see and perceive all other things, takes no notice of itself; and it requires art and pains to set it at a distance, and make it its own object. But, whatever be the difficulties that lie in the way of this inquiry; whatever it be, that keeps us so much in the dark to ourselves; sure I am, that all the light we can let in upon our own minds, all the acquaintance we can make with our own understandings, will not only be very pleasant, but bring us great advantage, in directing our thoughts in the search of other things.

An enquiry into the understanding, pleasant and useful.

§ 2. This, therefore, being my purpose, Design. to inquire into the original, certainty, and extent of human knowledge; together with the grounds and degrees of belief, opinion, and assent; I shall not at present meddle with the physical consideration of the mind; or trouble myself to examine, wherein its essence consists, or by what motions of our spirits,

or alterations of our bodies, we come to have any sensation by our organs, or any ideas in our understandings; and whether those ideas do in their formation, any, or all of them, depend on matter or no: These are speculations, which, however curious and entertaining, I shall decline, as lying out of my way in the design I am now upon. It shall suffice to my present purpose, to consider the discerning faculties of a man, as they are employed about the objects, which they have to do with: And I shall imagine I have not wholly misemployed myself in the thoughts I shall have on this occasion, if, in this historical, plain method, I can give any account of the ways, whereby our understandings come to attain those notions of things we have, and can set down any measures of the certainty of our knowledge, or the grounds of those persuasions, which are to be found amongst men, so various, different, and wholly contradictory; and yet asserted, somewhere or other, with such assurance and confidence, that he that shall take a view of the opinions of mankind, observe their opposition, and at the same time consider the fondness and devotion wherewith they are embraced, the resolution and eagerness wherewith they are maintained, may perhaps have reason to suspect, that either there is no such thing as truth at all; or that mankind hath no sufficient means to attain a certain knowledge of it.

Method. § 3. It is, therefore, worth while to search out the bounds between opinion and knowledge; and examine by what measures, in things, whereof we have no certain knowledge, we ought to regulate our assent, and moderate our persuasions. In order whereunto, I shall pursue this following method.

First, I shall enquire into the origin of those ideas, notions, or whatever else you please to call them, which a man observes, and is conscious to himself he has in his mind; and the ways, whereby the understanding comes to be furnished with them.

Secondly, I shall endeavour to shew what knowledge the understanding hath by those ideas; and the certainty, evidence, and extent of it.

Thirdly, I shall make some enquiry into the nature and grounds of faith, or opinion ; whereby I mean that assent, which we give to any proposition as true, of whose truth yet we have no certain knowledge : and here we shall have occasion to examine the reasons and degrees of assent.

§ 4. If, by this enquiry into the nature of the understanding, I can discover the powers thereof ; how far they reach ; to what things they are in any degree proportionate ; and where they fail us : I suppose it may be of use to prevail with the busy mind of man, to be more cautious in meddling with things exceeding its comprehension ; to stop when it is at the utmost extent of its tether ; and to sit down in a quiet ignorance of those things, which, upon examination, are found to be beyond the reach of our capacities. We should not then perhaps be so forward, out of an affectation of an universal knowledge, to raise questions, and perplex ourselves and others with disputes about things, to which our understandings are not suited ; and of which we cannot frame in our minds any clear or distinct perceptions, or whereof (as it has perhaps too often happened) we have not any notions at all. If we can find out how far the understanding can extend its view, how far it has faculties to attain certainty, and in what cases it can only judge and guess ; we may learn to content ourselves with what is attainable by us in this state.

§ 5. For, though the comprehension of our understandings comes exceeding short of the vast extent of things ; yet we shall have cause enough to magnify the bountiful author of our being, for that proportion and degree of knowledge he has bestowed on us, so far above all the rest of the inhabitants of this our mansion. Men have reason to be well satisfied with what God hath thought fit for them, since he hath given them (as St. Peter says) πάντα πρὸς ζωὴν καὶ εὐσέβειαν, whatsoever is necessary for the conveniences of life, and information of virtue ; and has put within the reach of their discovery the comfortable provision for this life, and the way that

Useful to know the extent of our comprehension.

Our capacity suited to our state and concerns.

leads to a better. How short soever their knowledge may come of an universal or perfect comprehension of whatsoever is, it yet secures their great concernments, that they have light enough to lead them to the knowledge of their maker, and the sight of their own duties. Men may find matter sufficient to busy their heads, and employ their hands with variety, delight and satisfaction; if they will not boldly quarrel with their own constitution, and throw away the blessings their hands are filled with, because they are not big enough to grasp every thing. We shall not have much reason to complain of the narrowness of our minds, if we will but employ them about what may be of use to us; for of that they are very capable: and it will be an unpardonable, as well as childish peevishness, if we undervalue the advantages of our knowledge, and neglect to improve it to the ends for which it was given us, because there are some things that are set out of the reach of it. It will be no excuse to an idle and untoward servant, who would not attend his business by candle-light, to plead that he had not broad sun-shine. The candle, that is set up in us, shines bright enough for all our purposes. The discoveries we can make with this, ought to satisfy us; and we shall then use our understandings right, when we entertain all objects in that way and proportion that they are suited to our faculties, and upon those grounds they are capable of being proposed to us, and not peremptorily, or intemperately require demonstration, and demand certainty, where probability only is to be had, and which is sufficient to govern all our concernments. If we will disbelieve every thing, because we certainly cannot know all things; we shall do muchwbat as wisely as he, who would not use his legs, but sit still and perish, because he had no wings to fly.

Knowledge
of our capa-
city, a cure
of scepti-
cism and
idleness.

§ 6. When we know our own strength, we shall the better know what to undertake with hopes of success: and when we have well surveyed the powers of our own minds, and made some estimate what we may expect from them, we shall not be inclined either to sit

still, and not set our thoughts on work at all, in despair of knowing any thing; or, on the other side, question every thing, and disclaim all knowledge, because some things are not to be understood. It is of great use to the sailor, to know the length of his line, though he cannot with it fathom all the depths of the ocean. It is well he knows, that it is long enough to reach the bottom, at such places as are necessary to direct his voyage, and caution him against running upon shoals that may ruin him. Our business here is not to know all things, but those which concern our conduct. If we can find out those measures, whereby a rational creature, put in that state in which man is in this world, may, and ought to govern his opinions, and actions depending thereon, we need not to be troubled that some other things escape our knowledge.

§ 7. This was that which gave the first rise to this essay concerning the understanding. For I thought that the first step towards satisfying several enquiries, the mind of man was very apt to run into, was to take a survey of our own understandings, examine our own powers, and see to what things they were adapted. Till that was done, I suspected we began at the wrong end, and in vain sought for satisfaction in a quiet and sure possession of truths that most concerned us, whilst we let loose our thoughts into the vast ocean of being; as if all that boundless extent were the natural and undoubted possession of our understandings, wherein there was nothing exempt from its decisions, or that escaped its comprehension. Thus men extending their enquiries beyond their capacities, and letting their thoughts wander into those depths, where they can find no sure footing; it is no wonder, that they raise questions, and multiply disputes, which, never coming to any clear resolution, are proper only to continue and increase their doubts, and to confirm them at last in perfect scepticism. Whereas, were the capacities of our understandings well considered, the extent of our knowledge once discovered, and the horizon found, which sets the bounds between the enlightened and dark parts of things, between

Occasion of
this essay.

what is, and what is not comprehensible by us ; men would perhaps with less scruple acquiesce in the avowed ignorance of the one, and employ their thoughts and discourse with more advantage and satisfaction in the other.

What idea stands for. § 8. Thus much I thought necessary to say concerning the occasion of this enquiry into human understanding. But, before I proceed on to what I have thought on this subject, I must here in the entrance beg pardon of my reader for the frequent use of the word "idea," which he will find in the following treatise. It being that term, which, I think, serves best to stand for whatsoever is the object of the understanding when a man thinks ; I have used it to express whatever is meant by phantasm, notion, species, or whatever it is which the mind can be employed about in thinking ; and I could not avoid frequently using it.*

* This modest apology of our author could not procure him the free use of the word *idea* ; but great offence has been taken at it, and it has been censured as of dangerous consequence : to which you may here see what he answers. 'The world, saith the * bishop of Worcester, hath been strangely amused with *ideas* of late ; and we have been told, that strange things might be done by the help of *ideas* ; and yet these *ideas*, at last, come to be only common notions of things, which we must make use of in our reasoning. You, (i.e. the author of the *Essay concerning Human Understanding*) say in that chapter, about the existence of God, you thought it most proper to express yourself, in the most usual and familiar way, by common words and expressions. I would you had done so quite through your book ; for then you had never given that occasion to the enemies of our faith, to take up your new way of *ideas*, as an effectual battery (as they imagined) against the mysteries of the Christian faith. But you might have enjoyed the satisfaction of your *ideas* long enough before I had taken notice of them, unless I had found them employed about doing mischief.'

To which our author † replies, it is plain, that that which your lordship apprehends, in my book, may be of dangerous consequence to the article which your lordship has endeavoured to defend, is my introducing *new terms* ; and that which your lordship instances in, is that of *ideas*. And the reason your lordship gives in every of these places, why your lordship has such an apprehension of *ideas*, that they may be of dangerous consequence to that article of faith, which your lordship

* Answer to Mr. Locke's First Letter.

† In his Second Letter to the Bishop of Worcester.

I presume it will be easily granted me, that there are such ideas in men's minds; every one is conscious of them in himself, and men's words and actions will satisfy him that they are in others.

Our first enquiry then shall be, how they come into the mind.

has endeavoured to defend, is because they have been applied to such purposes. And I might (your lordship says) have enjoyed the satisfaction of my *ideas* long enough before you had taken notice of them, unless your lordship had found them employed in doing mischief. Which, at last, as I humbly conceive, amounts to thus much, and no more, viz. That your lordship fears *ideas*, i. e. the term *ideas*, may, some time or other, prove of very dangerous consequence to what your lordship has endeavoured to defend, because they have been made use of in arguing against it. For I am sure your lordship does not mean, that you apprehend the things, signified by *ideas*, may be of dangerous consequence to the article of faith your lordship endeavours to defend, because they have been made use of against it: For (besides that your lordship mentions *terms*) that would be to expect that those who oppose that article, should oppose it without any thoughts; for the things signified by *ideas*, are nothing but the immediate objects of our minds in thinking: so that unless any one can oppose the article your lordship defends, without thinking on something, he must use the things signified by *ideas*; for he that thinks, must have some immediate object of his mind in thinking, i. e. must have *ideas*.

But whether it be the name, or the thing; *ideas* in sound, or *ideas* in signification; that your lordship apprehends *may be of dangerous consequence to that article of faith, which your lordship endeavours to defend*; it seems to me, I will not say a *new way of reasoning* (for that belongs to me), but were it not your lordship's, I should think it a very extraordinary way of *reasoning*, to write against a book, wherein your lordship acknowledges they are not used to bad purposes. nor employed to do mischief; only because you find that *ideas* are, by those who oppose your lordship, *employed to do mischief*; and so apprehend, *they may be of dangerous consequence to the article your lordship has engaged in the defence of*. For whether *ideas* as *terms*, or *ideas* as the immediate objects of the mind signified by those *terms*, may be, in your lordship's apprehension, *of dangerous consequence to that article*; I do not see how your lordship's writing against the *notion of ideas*, as stated in my book, will at all hinder your opposers *from employing them in doing mischief*, as before.

However, be that as it will, so it is, that your lordship apprehends these *new terms*, these *ideas*, *with which the world hath, of late, been so strangely amused* (though at last they come to be only common notions of things, as your lordship owns) *may be of dangerous consequence to that article*.

My lord, if any, in answer to your lordship's *sermons*, and in other *pamphlets*, wherein your lordship complains they have talked so much of *ideas*, have been troublesome to your lordship with that *term*; it is not strange that your lordship should be tired with that sound: but how

natural soever it be to our weak constitutions, to be offended with any sound, wherewith an importunate din hath been made about our ears ; yet, my lord, I know your lordship has a better opinion of the articles of our faith, than to think any of them can be overturned, or so much as shaken, with a breath formed into any sound, or *term* whatsoever.

Names are but the arbitrary marks of conceptions ; and so they be sufficiently appropriated to them in their use, I know no other difference any of them have in particular, but as they are of easy or difficult pronunciation, and of a more or less pleasant sound ; and what particular antipathies there may be in men to some of them, upon that account, is not easy to be foreseen. This I am sure, no *term* whatsoever in itself bears, one more than another, any opposition to truth of any kind ; they are only propositions that do or can oppose the truth of any article or doctrine ; and thus no *term* is privileged for being set in opposition to truth.

There is no word to be found, which may not be brought into a proposition, wherein the most sacred and most evident truths may be opposed : but that is not a fault in the *term*, but him that uses it. And therefore I cannot easily persuade myself (whatever your lordship hath said in the heat of your concern) that you have bestowed so much pains upon my book, because the word *idea* is so much used there. For though upon my saying, in my chapter about the existence of God, ' That I scarce used the word *idea* in that whole chapter,' your lordship wishes, that *I had done so quite through my book* : yet I must rather look upon that as a compliment to me, wherein your lordship wished that my book had been all through suited to vulgar readers, not used to that and the like *terms*, than that your lordship has such an apprehension of the word *idea* ; or that there is any such harm in the use of it, instead of the word *notion* (with which your lordship seems to take it to agree in signification), that your lordship would think it worth your while to spend any part of your valuable time and thoughts about my book, for having the word *idea* so often in it : for this would be to make your lordship, to write only against an impropriety of speech. I own to your lordship, it is a great condescension in your lordship to have done it, if that word have such a share in what your lordship has writ against my book, as some expressions would persuade one ; and I would, for the satisfaction of your lordship, change the *term* of *idea* for a better, if your lordship, or any one, could help me to it ; for, that *notion* will not so well stand for every immediate object of the mind in thinking, as *idea* does, I have (as I guess) somewhere given a reason in my book, by shewing that the term *notion* is more peculiarly appropriate to a certain sort of those objects, which I call mixed modes ; and, I think, it would not sound altogether so well, to say the *notion of red*, and the *notion of a horse* ; as the *idea of red*, and the *idea of a horse*. But if any one thinks it will, I contend not ; for I have no fondness for, nor an antipathy to, any particular articulate sounds : nor do I think there is any spell or fascination in any of them.

But be the word *idea* proper or improper, I do not see how it is the better or the worse, because *illmen* have made use of it, or because it has been made use of to *bad purposes* ; for if that be a reason to condemn or lay it by, we must lay by the terms, *scripture*, *reason*, *perception*, *distinct*, *clear*, &c. Nay, the name of *God* himself will not escape ; for I do not think any one of these, or any other term, can be produced, which hath not been made use of by such men, and to such purposes.

And therefore, if the unitarians in their late pamphlets have talked very much of, and strangely amused the world with ideas; I cannot believe your lordship will think that word one jot the worse, or the more dangerous, because they use it; any more than, for their use of them, you will think *reason* or *scripture* terms ill or dangerous. And therefore what your lordship says, that *I might have enjoyed the satisfaction of my ideas long enough before your lordship had taken notice of them, unless you had found them employed in doing mischief*; will, I presume, when your lordship has considered again of this matter, prevail with your lordship, to let me enjoy still the *satisfaction I take in my ideas*, i.e. as much satisfaction as I can take in so small a matter, as is the using of a proper term, notwithstanding it *should be employed by others in doing mischief*.

For, my lord, if I should leave it wholly out of my book, and substitute the word *notion* every where in the room of it; and every body else do so too (though your lordship does not, I suppose, suspect, that I have the vanity to think they would follow my example) my book would, it seems, be the more to your lordship's liking; but I do not see how this would one jot abate the *mischief* your lordship complains of. For the unitarians might as much employ *notions*, as they do now *ideas*, to do *mischief*; unless they are such fools to think they can conjure with this notable word *idea*; and that the force of what they say, lies in the sound, and not in the signification of their terms.

This I am sure of, that the truths of the Christian religion can be no more battered by one word than another; nor can they be beaten down or endangered by any sound whatsoever. And I am apt to flatter myself, that your lordship is satisfied that there is no harm in the word *ideas*, because you say, you should not have taken any notice of my *ideas*, if the enemies of our faith had not taken up my new way of ideas, as an effectual battery against the mysteries of the Christian faith. In which place, by new way of ideas, nothing, I think, can be construed to be meant, but my expressing myself by that of *ideas*; and not by other more common words, and of ancienter standing in the English language.

As to the objection, of the author's way by *ideas* being a new way, he thus answers: *my new way by ideas, or my way by ideas*, which often occurs in your lordship's letter, is, I confess, a very large and doubtful expression; and may, in the full latitude, comprehend my whole essay; because, treating in it of the *understanding*, which is nothing but the faculty of thinking, I could not well treat of that faculty of the mind, which consists in thinking, without considering the immediate objects of the mind in thinking, which I call *ideas*: and therefore in treating of the *understanding*, I guess it will not be thought strange, that the greatest part of my book has been taken up, in considering what these objects of the mind, in thinking, are; whence they come; what use the mind makes of them, in its several ways of thinking; and what are the outward marks whereby it signifies them to others, or records them for its own use. And this, in short, is *my way by ideas*, that which your lordship calls *my new way by ideas*: which, my lord, if it be new, it is but a new history of an old thing. For I think it will not be doubted, that men always performed the actions of *thinking, reasoning, believing, and knowing*, just after the same manner they do now; though whether the same account has heretofore been given of the way how they performed these actions, or wherein they consisted, I do not know. Were I as well read as your lordship, I should have

been safe from that gentle reprimand of your lordship's, for thinking *my way of ideas*, NEW, for want of looking into other men's thoughts, which appear in their books.

Your lordship's words, as an acknowledgment of your instructions in the case, and as a warning to others, who will be so bold adventurers as to spin any thing barely out of their own thoughts, I shall set down at large: And they run thus: *Whether you took this way of ideas from the modern philosopher, mentioned by you, is not at all material; but I intended no reflection upon you in it (for that you mean, by my commending you as a scholar of so great a master;) I never meant to take from you the honour of your own inventions: and I do believe you when you say, That you wrote from your own thoughts, and the ideas you had there. But many things may seem new to one, who converses only with his own thoughts, which really are not so; as he may find, when he looks into the thoughts of other men, which appear in their books. And therefore, although I have a just esteem for the invention of such, who can spin volumes barely out of their own thoughts; yet I am apt to think, they would oblige the world more, if, after they have thought so much themselves, they would examine what thoughts others have had before them, concerning the same things: that so those may not be thought their own inventions which are common to themselves and others. If a man should try all the magnetical experiments himself, and publish them as his own thoughts, he might take himself to be the inventor of them: but he that examines and compares with them what Gilbert, and others have done before him, will not diminish the praise of his diligence, but may wish he had compared his thoughts with other men's; by which the world would receive greater advantage, although he had lost the honour of being an original.*

To alleviate my fault herein, I agree with your lordship, that many things may seem NEW, to one that converses only with his own thoughts, which really are not so; but I must crave leave to suggest to your lordship, that if in the spinning them out of his own thoughts, they seem new to him, he is certainly the inventor of them; and they may as justly be thought his own invention, as any one's; and he is as certainly the inventor of them, as any one who thought on them before him: the distinction of invention, or not invention, lying not in thinking first, or not first, but in borrowing, or not borrowing, our thoughts from another: and he to whom, spinning them out of his own thoughts, they seem new, could not certainly borrow them from another. So he truly invented printing in Europe, who without any communication with the Chinese, spun it out of his own thoughts; thought it were ever so true, that the Chinese had the use of printing, nay, of printing in the very same way, among them, many ages before him. So that he that spins any thing out of his own thoughts, that seems new to him, cannot cease to think it his own invention, should he examine ever so far, what thoughts others have had before him, concerning the same thing, and should find by examining, that they had the same thoughts too.

But what great obligation this would be to the world, or weighty cause of turning over and looking into books, I confess I do not see. The great end to me, in conversing with my own or other men's thoughts, in matters of speculation, is to find truth, without being much concerned whether my own spinning of it out of mine, or their spinning of it out of their own thoughts, helps me to it. And how little I affect the honour

of an *original*, may be seen at that place of my book, where, if any where, that itch of vain-glory was likeliest to have shewn itself, had I been so over-run with it, as to need a cure. It is where I speak of certainty in these following words, taken notice of by your lordship, in another place : ' I think I have shewn wherein it is that certainty, real ' certainty consists, which whatever it was to others, was, I confess, to ' me, heretofore, one of those *desiderata*, which I found great want of.'

Here, my lord, however *new* this *seemed* to me, and the more so because possibly I had in vain hunted for it in the *books of others* ; yet I spoke of it as *new*, only to myself : leaving others in the undisturbed possession of what either by invention, or reading, was theirs before ; without assuming to myself any other honour, but that of my own ignorance, till that time, if others before had shewn wherein certainty lay. And yet, my lord, if I had, upon this occasion, been forward to assume to myself the *honour of an original*, I think I had been pretty safe in it ; since I should have had your lordship for my guarantee and *vindicator* in that point, who are pleased to call it *new* ; and, as such, to write against it.

And truly, my lord, in this respect, my book has had very unlucky stars, since it hath had the misfortune to displease your lordship, with many things in it, for their novelty ; as *new way of reasoning* ; *new hypothesis about reason* ; *new sort of certainty* ; *new terms* ; *new way of ideas* ; *new method of certainty*, &c. And yet in other places, your lordship seems to think it worthy in me of your lordship's reflection, for saying, but what others have said before ; as where I say, ' In the different make of men's tempers, and application of their thoughts, ' some arguments prevail more on one, and some on another, for the ' confirmation of the same truth.' Your lordship asks, *What is this different from what all men of understanding have said ?* Again, I take it, your lordship meant not these words for a commendation of my book, where you say, *But if no more be meant by* ' The simple ideas that ' come in by sensation, or reflection, and their being the foundation of ' our knowledge,' *but that our notions of things come in, either from our senses or the exercise of our minds : as there is nothing extraordinary in the discovery, so your lordship is far enough from opposing that, wherein you think all mankind are agreed.*

And again, *But what need all this great noise about ideas and certainty, true and real certainty by ideas ; if, after all, it comes only to this, that our ideas only represent to us such things, from whence we bring arguments to prove the truth of things ?*

But, *the world hath been strangely amused with ideas of late ; and we have been told that strange things might be done by the help of ideas ; and yet these ideas, at last, come to be only common notions of things, which we must make use of in our reasoning.* And to the like purpose in other places.

Whether, therefore, at last, your lordship will resolve that it is *new* or no ; or more faulty by its being *new*, must be left to your lordship. This I find by it, that my book cannot avoid being condemned on the one side or the other, nor do I see a possibility to help it. If there be readers that like only new thoughts ; or, on the other side, others that can bear nothing but what can be justified by received authorities in print ; I must desire them to make themselves amends in that part which they like, for the displeasure they receive in the other : but if any should

be so exact, as to find fault with both, truly, I know not well what to say to them. The case is a plain case, the book is all over naught, and there is not a sentence in it, that is not, either for its antiquity or novelty, to be condemned, and so there is a short end of it. From your lordship, indeed, in particular, I can hope for something better; for your lordship thinks the *general design of it so good*, that that, I flatter myself, would prevail on your lordship to preserve it from the fire.

But as to the way, your lordship thinks, I should have taken to prevent the *having it thought my invention, when it was common to me with others*, it unluckily so fell out, in the subject of my *Essay of Human Understanding*, that I could not look into the thoughts of other men to inform myself. For my design being, as well as I could, to copy nature, and to give an account of the operations of the mind in thinking; I could look into no-body's understanding but my own, to see how it wrought; nor have a prospect into other men's minds, to view their thoughts there; and observe what steps and motions they took, and by what gradations they proceeded in their acquainting themselves with truth, and their advance in knowledge: what we find of their thoughts in books, is but the result of this, and not the progress and working of their minds, in coming to the opinions or conclusions they set down and published.

All therefore, that I can say of my book, is, that it is a copy of my own mind, in its several ways of operation. And all that I can say for the publishing of it is, that I think the intellectual faculties are made, and operate alike in most men; and that some, that I shewed it to before I published it, liked it so well, that I was confirmed in that opinion. And therefore, if it should happen, that it should not be so, but that some men should have ways of thinking, reasoning, or arriving at certainty, different from others, and above those that I find my mind to use and acquiesce in, I do not see of what use my book can be to them. I can only make it my humble request, in my own name, and in the name of those that are of my size, who find their minds work, reason, and know in the same low way that mine does, that those men of a more happy genius would shew us the way of their nobler flights; and particularly would discover to us their shorter or surer way to certainty, than by *ideas*, and the observing their agreement or disagreement.

Your lordship adds, *But now, it seems nothing is intelligible but what suits with the new way of ideas.* My lord, *The new way of ideas*, and the old way of speaking *intelligibly* * was always and ever will be the same: and if I may take the liberty to declare my sense of it, herein it consists: 1. That a man use no words, but such as he makes the signs of certain determined objects of his mind in thinking, which he can make known to another. 2. Next, that he use the same word steadily for the sign of the same immediate object of his mind in thinking. 3. That he join those words together in propositions, according to the grammatical rules of that language he speaks in. 4. That he unite those sentences in a coherent discourse. Thus, and thus only, I humbly conceive, any one may preserve himself from the confines and suspicion of jargon, whether he pleases to call those immediate objects of his mind, which his words do, or should stand for, *ideas* or no.

* Mr. Locke's Third Letter to the Bishop of Worcester.

CHAP. II.

No Innate Principles in the Mind.

§ 1. ✓ It is an established opinion amongst some men, that there are in the understanding certain innate principles; some primary notions, *καὶ αὐτὰ ἔννοια*, characters, as it were, stamped upon the mind of man, which the soul receives in its very first being; and brings into the world with it. ✓ It would be sufficient to convince unprejudiced readers of the falseness of this supposition, if I should only shew (as I hope I shall in the following parts of this discourse) how men, barely by the use of their natural faculties, may attain to all the knowledge they have, without the help of any innate impressions; and may arrive at certainty, without any such original notions or principles. ✓ For I imagine any one will easily grant, that it would be impertinent to suppose, the ideas of colours innate in a creature, to whom God hath given sight, and a power to receive them by the eyes, from external objects: and no less unreasonable would it be to attribute several truths to the impressions of nature, and innate characters, when we may observe in ourselves faculties, fit to attain as easy and certain knowledge of them, as if they were originally imprinted on the mind. ✓

But because a man is not permitted without censure to follow his own thoughts in the search of truth, when they lead him ever so little out of the common road; I shall set down the reasons that made me doubt of the truth of that opinion, as an excuse for my mistake, if I be in one; which I leave to be considered by those, who, with me, dispose themselves to embrace truth, wherever they find it.

§ 2. ✓ There is nothing more commonly taken for granted, than that there are certain principles, both speculative and prac-

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tical (for they speak of both) universally agreed upon by all mankind: which therefore, they argue, must needs be constant impressions, which the souls of men receive in their first beings, and which they bring into the world with them, as necessarily and really as they do any of their inherent faculties.

Universal consent proves nothing innate. § 3. This argument, drawn from universal consent, has this misfortune in it, that if it were true in matter of fact, that there were certain truths, wherein all mankind agreed, it would not prove them innate, if there can be any other way shewn, how men may come to that universal agreement, in the things they do consent in; which I presume may be done.

“What is, is;” and, “it is impossible for the same thing to be, and not to be,” not universally assented to. § 4. But, which is worse, this argument of universal consent, which is made use of to prove innate principles, seems to me a demonstration that there are none such; because there are none to which all mankind give an universal assent. I shall begin with the speculative, and instance in those magnified principles of demonstration; “whatsoever is, is;” and, “it is impossible for the same thing to be, and not to be;” which, of all others, I think have the most allowed title to innate. These have so settled a reputation of maxims universally received, that it will, no doubt, be thought strange, if any one should seem to question it. But yet I take liberty to say, that these propositions are so far from having an universal assent, that there are a great part of mankind to whom they are not so much as known.

Not on the mind naturally imprinted, because not known to children, idiots, &c. § 5. For, first, it is evident, that all children and idiots have not the least apprehension or thought of them; and the want of that is enough to destroy that universal assent, which must needs be the necessary concomitant of all innate truths: it seeming to me near a contradiction, to say, that there are truths imprinted on the soul, which it perceives or understands not; imprinting, if it signify any thing, being nothing else, but the making certain truths to be per-

ceived. For to imprint any thing on the mind, without the mind's perceiving it, seems to me hardly intelligible. If therefore children and idiots have souls, have minds, with those impressions upon them, they must unavoidably perceive them, and necessarily know and assent to these truths: which since they do not, it is evident that there are no such impressions. For if they are not notions naturally imprinted, how can they be innate? and if they are notions imprinted, how can they be unknown? To say a notion is imprinted on the mind, and yet at the same time to say, that the mind is ignorant of it, and never yet took notice of it, is to make this impression nothing. No proposition can be said to be in the mind, which it never yet knew, which it was never yet conscious of. For if any one may, then, by the same reason, all propositions that are true, and the mind is capable of ever assenting to, may be said to be in the mind, and to be imprinted: since, if any one can be said to be in the mind, which it never yet knew, it must be only, because it is capable of knowing it, and so the mind is of all truths it ever shall know. Nay, thus truths may be imprinted on the mind, which it never did, nor ever shall know: for a man may live long, and die at last in ignorance of many truths, which his mind was capable of knowing, and that with certainty. So that if the capacity of knowing, be the natural impression contended for, all the truths a man ever comes to know, will, by this account, be every one of them innate; and this great point will amount to no more, but only to a very improper way of speaking; which, whilst it pretends to assert the contrary, says nothing different from those, who deny innate principles. For nobody, I think, ever denied that the mind was capable of knowing several truths. The capacity, they say, is innate, the knowledge acquired. But then to what end such contest for certain innate maxims? If truths can be imprinted on the understanding without being perceived, I can see no difference there can be, between any truths the mind is capable of knowing, in respect of their original: they must all be innate, or all adventitious: in vain shall a man go about to distinguish them. He

therefore, that talks of innate notions in the understanding, cannot (if he intend thereby any distinct sort of truths) mean such truths to be in the understanding, as it never perceived, and is yet wholly ignorant of. For if these words (to be in the understanding) have any propriety, they signify to be understood : so that, to be in the understanding, and not to be understood ; to be in the mind, and never to be perceived ; is all one, as to say, any thing is, and is not, in the mind or understanding. If therefore these two propositions, “ whatsoever is, is ; ” and “ it is impossible for the same thing to be, and not to be, ” are by nature imprinted, children cannot be ignorant of them ; infants, and all that have souls, must necessarily have them in their understandings, know the truth of them, and assent to it.

That men know them when they come to the use of reason, answered. § 6. To avoid this, it is usually answered, That all men know and assent to them, when they come to the use of reason, and this is enough to prove them innate. I answer,

§ 7. Doubtful expressions that have scarce any signification, go for clear reasons, to those, who being prepossessed, take not the pains to examine, even what they themselves say. For to apply this answer with any tolerable sense to our present purpose, it must signify one of these two things ; either, that, as soon as men come to the use of reason, these supposed native inscriptions come to be known, and observed by them : or else, that the use and exercise of men’s reason assists them in the discovery of these principles, and certainly makes them known to them.

If reason discovered them, that would not prove them innate. ✓ § 8. If they mean, that by the use of reason men may discover these principles ; and that this is sufficient to prove them innate : their way of arguing will stand thus, (viz.) that, whatever truths reason can certainly discover to us, and make us firmly assent to, those are all naturally imprinted on the mind ; since that universal assent, which is made the mark of them, amounts to no more but this ; that by the use of reason, we are capable to come to a certain knowledge

of, and assent to them; and, by this means, there will be no difference between the maxims of the mathematicians, and theorems they deduce from them; all must be equally allowed innate; they being all discoveries made by the use of reason, and truths that a rational creature may certainly come to know, if he apply his thoughts rightly that way. ✓

§ 9. But how can these men think the use of reason necessary, to discover principles that are supposed innate, when reason (if we may believe them) is nothing else but the faculty of deducing unknown truths from principles, or propositions, that are already known? ✓ That certainly can never be thought innate, which we have need of reason to discover; unless, as I have said, we will have all the certain truths, that reason ever teaches us, to be innate. We may as well think the use of reason necessary to make our eyes discover visible objects, as that there should be need of reason, or the exercise thereof, to make the understanding see what is originally engraven on it, and cannot be in the understanding before it be perceived by it. So that to make reason discover those truths, thus imprinted, is to say, that the use of reason discovers to a man what he knew before: and if men have those innate impressed truths originally, and before the use of reason, and yet are always ignorant of them, till they come to the use of reason, it is in effect to say, that men know, and know them not, at the same time. ✓

§ 10. It will here perhaps be said, that mathematical demonstrations, and other truths that are not innate, are not assented to, as soon as proposed, wherein they are distinguished from these maxims, and other innate truths. I shall have occasion to speak of assent, upon the first proposing, more particularly by and by. I shall here only, and that very readily, allow, that these maxims and mathematical demonstrations are in this different; that the one have need of reason, using of proofs, to make them out, and to gain our assent; but the other, as soon as understood, are, without any the least reasoning, embraced and assented to. But I withal beg leave to observe, that it lays open the weakness of

this subterfuge, which requires the use of reason for the discovery of these general truths: since it must be confessed, that in their discovery there is no use made of reasoning at all. And I think those, who give this answer, will not be forward to affirm, that the knowledge of this maxim, "That it is impossible for the same thing to be, and not to be," is a deduction of our reason. For this would be to destroy that bounty of nature they seem so fond of, whilst they make the knowledge of those principles to depend on the labour of our thoughts. For all reasoning is search, and casting about, and requires pains and application. And how can it with any tolerable sense be supposed, that what was imprinted by nature, as the foundation and guide of our reason, should need the use of reason to discover it?

§ 11. Those who will take the pains to reflect with a little attention on the operations of the understanding, will find, that this ready assent of the mind to some truths, depends not, either on native inscription, or the use of reason; but on a faculty of the mind quite distinct from both of them, as we shall see hereafter. Reason, therefore, having nothing to do in procuring our assent to these maxims, if by saying, that men know and assent to them, when they come to the use of reason, be meant, that the use of reason assists us in the knowledge of these maxims, it is utterly false; and were it true, would prove them not to be innate.

§ 12. If by knowing and assenting to them, when we come to the use of reason, be meant, that this is the time when they come to be taken notice of by the mind; and that, as soon as children come to the use of reason, they come also to know and assent to these maxims; this also is false and frivolous. First, It is false: Because it is evident these maxims are not in the mind so early as the use of reason: and therefore the coming to the use of reason is falsely assigned, as the time of their discovery. How many instances of the use of reason may we observe in children, a long time before they have any knowledge of this maxim, "That it is impossible for the same

The coming
to the use of
reason, not
the time we
come to
know these
maxims.

thing to be, and not to be?" And a great part of illiterate people, and savages, pass many years, even of their rational age, without ever thinking on this, and the like general propositions. I grant, men come not to the knowledge of these general and more abstract truths, which are thought innate, till they come to the use of reason; and I add, nor then neither. Which is so, because, till after they come to the use of reason, those general abstract ideas are not framed in the mind, about which those general maxims are, which are mistaken for innate principles; but are indeed discoveries made, and verities introduced and brought into the mind by the same way, and discovered by the same steps, as several other propositions, which nobody was ever so extravagant as to suppose innate. This I hope to make plain in the sequel of this discourse. I allow therefore a necessity, that men should come to the use of reason before they get the knowledge of those general truths; but deny, that men's coming to the use of reason is the time of their discovery.

§ 13. In the mean time it is observable, By this they that this saying, That men know and assent to these maxims, when they come to the use of reason, amounts in reality of fact to no more but this, That they are never known or taken notice of, before the use of reason, but may possibly be assented to, some time after, during a man's life; but when, is uncertain: and so may all other knowable truths, as well as these; which therefore have no advantage nor distinction from others, by this note of being known when we come to the use of reason; nor are thereby proved to be innate, but quite the contrary.

§ 14. But, secondly, were it true, that the precise time of their being known, and assented to, were, when men come the use of reason, neither would that prove them innate. This way of arguing is as frivolous, as the supposition of itself is false. For by what kind of logic will it appear,

By this they are not distinguished from other knowable truths.

If coming to the use of reason were the time of their discovery, it would not prove them innate,

that any notion is originally by nature imprinted in the mind in its first constitution, because it comes first to be observed and assented to, when a faculty of the mind, which has quite a distinct province, begins to exert itself? And therefore, the coming to the use of speech, if it were supposed the time that these maxims are first assented to (which it may be with as much truth, as the time when men come to the use of reason) would be as good a proof that they were innate, as to say, they are innate, because men assent to them, when they come to the use of reason. I agree then with these men of innate principles, that there is no knowledge of these general and self-evident maxims in the mind, till it comes to the exercise of reason: but I deny that the coming to the use of reason is the precise time when they are first taken notice of; and if that were the precise time, I deny that it would prove them innate. All that can with any truth be meant by this proposition, that men assent to them when they come to the use of reason, is no more but this, that the making of general abstract ideas, and the understanding of general names, being a concomitant of the rational faculty, and growing up with it, children commonly get not those general ideas, nor learn the names that stand for them, till, having for a good while exercised their reason about familiar and more particular ideas, they are, by their ordinary discourse and actions with others, acknowledged to be capable of rational conversation. If assenting to these maxims, when men come to the use of reason, can be true in any other sense, I desire it may be shewn; or at least, how in this, or any other sense, it proves them innate.

The steps by which the mind attains several truths. § 15. / The senses at first let in particular ideas, and furnish the yet empty cabinet; and the mind by degrees growing familiar with some of them, they are lodged in the memory, and names got to them. Afterwards the mind, proceeding farther, abstracts them, and by degrees learns the use of general names. In this manner the mind comes to be furnished with ideas and language, the

materials about which to exercise its discursive faculty: and the use of reason becomes daily more visible, as these materials, that give it employment, increase. But though the having of general ideas, and the use of general words and reason, usually grow together; yet, I see not, how this any way proves them innate. The knowledge of some truths, I confess, is very early in the mind; but in a way that shows them not to be innate. For, if we will observe, we shall find it still to be about ideas, not innate, but acquired: It being about those first which are imprinted by external things, with which infants have earliest to do, which make the most frequent impressions on their senses. In ideas thus got, the mind discovers that some agree, and others differ, probably as soon as it has any use of memory; as soon as it is able to retain and perceive distinct ideas. But whether it be then, or no, this is certain, it does so, long before it has the use of words, or comes to that, which we commonly call "the use of reason." For a child knows as certainly, before it can speak, the difference between the ideas of sweet and bitter (i. e. that sweet is not bitter) as it knows afterwards (when it comes to speak) that wormwood and sugar-plums are not the same thing.

§ 16. A child knows not that three and four are equal to seven, till he comes to be able to count seven, and has got the name and idea of equality: and then, upon explaining those words, he presently assents to, or rather perceives the truth of that proposition. But neither does he then readily assent, because it is an innate truth, nor was his assent wanting till then, because he wanted the use of reason; but the truth of it appears to him, as soon as he has settled in his mind the clear and distinct ideas, that these names stand for: and then he knows the truth of that proposition, upon the same grounds, and by the same means, that he knew before, that a rod and a cherry are not the same thing; and upon the same grounds also, that he may come to know afterwards, "that it is impossible for the same thing to be, and not to be," as shall be more fully shown here-

after. So that the later it is before any one comes to have those general ideas, about which those maxims are; or to know the signification of those general terms that stand for them; or to put together in his mind the ideas they stand for; the later also will it be before he comes to assent to those maxims, whose terms, with the ideas they stand for, being no more innate than those of a cat or a weasel, he must stay till time and observation have acquainted him with them; and then he will be in a capacity to know the truth of these maxims, upon the first occasion that shall make him put together those ideas in his mind, and observe whether they agree or disagree, according as is expressed in those propositions. And therefore it is, that a man knows that eighteen and nineteen are equal to thirty-seven, by the same self-evidence, that he knows one and two to be equal to three: yet a child knows this not so soon as the other; not for want of the use of reason, but because the ideas the words eighteen, nineteen, and thirty-seven stand for, are not so soon got, as those which are signified by one, two, and three.

- Assenting as soon as proposed and understood, proves them not innate. § 17. This evasion therefore of general assent, when men come to the use of reason, failing as it does, and leaving no difference between those supposed innate, and other truths, that are afterwards acquired and learnt, men have endeavoured to secure an universal assent to those they call maxims, by saying
1. they are generally assented to as soon as proposed, and the terms they are proposed in understood: seeing all men, even children, as soon as they hear and understand the terms, assent to these propositions, they think it is sufficient to prove them innate. / For since men never fail, after they have once understood the words, to acknowledge them for undoubted truths, they would infer, that certainly these propositions were first lodged in the understanding, which, without any teaching, the mind, at the very first proposal, immediately closes with, and assents to, and after that never doubts again.

§ 18. In answer to this, I demand “whether ready assent given to a proposition upon first hearing, and understanding the terms, be a certain mark of an innate principle?” If it be not, such a general assent is in vain urged as a proof of them: if it be said, that it is a mark of innate, they must then allow all such propositions to be innate, which are generally assented to as soon as heard, whereby they will find themselves plentifully stored with innate principles. For, upon the same ground, viz. of assent at first hearing and understanding the terms, that men would have those maxims pass for innate, they must also admit several propositions about numbers to be innate: and thus, that one and two are equal to three; that two and two are equal to four; and a multitude of other the like propositions in numbers, that every body assents to at first hearing and understanding the terms, must have a place amongst these innate axioms. Nor is this the prerogative of numbers alone, and propositions made about several of them; but even natural philosophy, and all the other sciences, afford propositions, which are sure to meet with assent as soon as they are understood. That two bodies cannot be in the same place, is a truth, that nobody any more sticks at, than at these maxims, “that it is impossible for the same thing to be, and not to be; that white is not black; that a square is not a circle; that yellowness is not sweetness:” these and a million of such other propositions, as many at least as we have distinct ideas of, every man in his wits, at first hearing, and knowing what the names stand for, must necessarily assent to. If these men will be true to their own rule, and have assent at first hearing and understanding the terms, to be a mark of innate, they must allow, not only as many innate propositions as men have distinct ideas; but as many as men can make propositions wherein different ideas are denied one of another. Since every proposition, wherein one different idea is denied of another,

If such an assent be a mark of innate, then “that one and two are equal to three; that sweetness is not bitterness;” and a thousand the like, must be innate.

will as certainly find assent at first hearing and understanding the terms, as this general one "it is impossible for the same thing to be, and not to be;" or that which is the foundation of it, and is the easier understood of the two, "the same is not different:" by which account they will have legions of innate propositions of this one sort, without mentioning any other. But since no proposition can be innate, unless the ideas about which it is, be innate; this will be, to suppose all our ideas of colours, sounds, tastes, figure, &c. innate; than which there cannot be any thing more opposite to reason and experience. Universal and ready assent upon hearing and understanding the terms is (I grant) a mark of self-evidence: but self-evidence, depending not on innate impressions, but on something else (as we shall shew hereafter) belongs to several propositions, which nobody was yet so extravagant as to pretend to be innate.

Such less
general pro-
positions
known be-
fore these
universal
maxims.

§ 19. Nor let it be said, That those more particular self-evident propositions, which are assented to at first hearing, as that one and two are equal to three; that green is not red, &c.; are received as the consequences of those more universal propositions, which are looked on as innate principles; since any one, who will but take the pains to observe what passes in the understanding, will certainly find, that these, and the like less general propositions, are certainly known, and firmly assented to, by those who are utterly ignorant of those more general maxims; and so, being earlier in the mind than those (as they are called) first principles, cannot owe to them the assent wherewith they are received at first hearing.

One and
one equal
to two, &c.
not general
nor useful,
answered.

§ 20. If it be said, that "these propositions, viz. two and two are equal to four; red is not blue, &c.; are not general maxims, nor of any great use:" I answer, that makes nothing to the argument of universal assent, upon hearing and understanding. For, if that be the certain mark of innate, what-

ever proposition can be found, that receives general assent as soon as heard and understood, that must be admitted for an innate proposition, as well as this maxim, "that it is impossible for the same thing to be, and not to be;" they being upon this ground equal. And as to the difference of being more general, that makes this maxim more remote from being innate; those general and abstract ideas being more strangers to our first apprehensions, than those of more particular self-evident propositions; and therefore it is longer before they are admitted and assented to by the growing understanding. And as to the usefulness of these magnified maxims, that perhaps will not be found so great as is generally conceived, when it comes in its due place to be more fully considered. ✓

§ 21. But we have not yet done with assenting to propositions at first hearing and understanding their terms; it is fit we first take notice, that this, instead of being a mark that they are innate, is a proof of the contrary; since it supposes, that several, who understand and know other things, are ignorant of these principles, till they are proposed to them; and that one may be unacquainted with these truths, till he hears them from others. For if they were innate, what need they be proposed in order to gaining assent, when by being in the understanding, by a natural and original impression, (if there were any such) they could not but be known before? Or doth the proposing them, print them clearer in the mind than nature did? If so, then the consequence will be, that a man knows them better, after he has been thus taught them, than he did before. Whence it will follow, that these principles may be made more evident to us by others teaching, than nature has made them by impression; which will ill agree with the opinion of innate principles, and give but little authority to them; but, on the contrary, makes them unfit to be the foundations of all our other knowledge, as they are pretended

These maxims not being known sometimes till proposed, proves them not innate.

to be. This cannot be denied, that men grow first acquainted with many of these self-evident truths, upon their being proposed: but it is clear, that whosoever does so, finds in himself, that he then begins to know a proposition, which he knew not before; and which, from thenceforth, he never questions: not because it was innate, but because the consideration of the nature of the things contained in those words, would not suffer him to think otherwise, how, or whensoever he is brought to reflect on them. And if whatever is assented to at first hearing and understanding the terms, must pass for an innate principle, every well-grounded observation, drawn from particulars into a general rule, must be innate. When yet it is certain, that not all, but only sagacious heads light at first on these observations, and reduce them into general propositions, not innate, but collected from a preceding acquaintance, and reflection on particular instances. These, when observing men have made them, unobserving men, when they are proposed to them, cannot refuse their assent to.

§ 22. If it be said, "the understanding hath an implicit knowledge of these principles, but not an explicit, before this first hearing," (as they must, who will say, "that they are in the understanding before they are known") it will be hard to conceive what is meant by a principle imprinted on the understanding implicitly; unless it be this, that the mind is capable of understanding and assenting firmly to such propositions. And thus all mathematical demonstrations, as well as first principles, must be received as native impressions on the mind: which I fear they will scarce allow them to be, who find it harder to demonstrate a proposition, than assent to it when demonstrated. And few mathematicians will be forward to believe, that all the diagrams they have drawn, were but copies of those innate characters which nature had engraven upon their minds.

Implicitly known before proposing, signifies, that the mind is capable of understanding them, or else signifies nothing.

§ 23. There is, I fear, this farther weakness in the foregoing argument, which would persuade us, that therefore those maxims are to be thought innate, which men admit at first hearing, because they assent to propositions, which they are not taught, nor do receive from the force of any argument or demonstration, but a bare explication or understanding of the terms. Under which, there seems to me to lie this fallacy, that men are supposed not to be taught, nor to learn any thing *de novo* ; when, in truth, they are taught, and do learn something they were ignorant of before. For first it is evident, that they have learned the terms, and their signification ; neither of which was born with them. But this is not all the acquired knowledge in the case : the ideas themselves, about which the proposition is, are not born with them, no more than their names, but got afterwards. So that in all propositions that are assented to at first hearing, the terms of the proposition, their standing for such ideas, and the ideas themselves that they stand for, being neither of them innate ; I would fain know what there is remaining in such propositions, that is innate. For I would gladly have any one name that proposition, whose terms or ideas were either of them innate. We by degrees get ideas and names, and learn their appropriated connexion one with another ; and then to propositions, made in such terms, whose signification we have learnt, and wherein the agreement or disagreement we can perceive in our ideas, when put together, is expressed, we at first hearing assent ; though to other propositions, in themselves as certain and evident, but which are concerning ideas, not so soon or so easily got, we are at the same time no way capable of assenting. For though a child quickly assents to this proposition, “ that an apple is not fire,” when, by familiar acquaintance, he has got the ideas of those two different things distinctly imprinted on his mind, and has learnt that the names apple and fire stand for them ; yet it will be some years after, perhaps, before

The argument of assenting on first hearing, is upon a false supposition of no precedent teaching.

the same child will assent to this proposition, "that it is impossible for the same thing to be, and not to be:" because that, though, perhaps the words are as easy to be learnt, yet the signification of them being more large, comprehensive, and abstract, than of the names annexed to those sensible things the child hath to do with, it is longer before he learns their precise meaning, and it requires more time plainly to form in his mind those general ideas they stand for. Till that be done, you will in vain endeavour to make any child assent to a proposition made up of such general terms: but as soon as ever he has got those ideas, and learned their names, he forwardly closes with the one, as well as the other of the forementioned propositions, and with both for the same reason; viz. because he finds the ideas he has in his mind to agree or disagree, according as the words standing for them, are affirmed or denied one of another in the proposition. But if propositions be brought to him in words, which stand for ideas he has not yet in his mind; to such propositions, however evidently true or false in themselves, he affords neither assent nor dissent, but is ignorant. For words being but empty sounds, any farther than they are signs of our ideas, we cannot but assent to them, as they correspond to those ideas we have, but no farther than that. But the showing by what steps and ways knowledge comes into our minds, and the grounds of several degrees of assent, being the business of the following discourse, it may suffice to have only touched on it here, as one reason that made me doubt of those innate principles.

Not innate,
because not
universally
assented to.

§ 24. To conclude this argument of universal consent, I agree with these defenders of innate principles, that if they are innate, they must needs have universal assent. For that a truth should be innate, and yet not assented to, is to me as unintelligible, as for a man to know a truth, and be ignorant of it, at the same time. But then, by these men's own confession, they cannot be innate; since they are not assented to by those who un-

derstand not the terms, nor by a great part of those who do understand them, but have yet never heard nor thought of those propositions ; which, I think, is at least one half of mankind. But were the number far less, it would be enough to destroy universal assent, and thereby show these propositions not to be innate, if children alone were ignorant of them.

§ 25. But that I may not be accused to ^{These man-}argue from the thoughts of infants, which ^{ims not the} are unknown to us, and to conclude from ^{first known.} what passes in their understandings before they express it ; I say next, that these two general propositions are not the truths that first possess the minds of children, nor are antecedent to all acquired and adventitious notions ; which, if they were innate, they must needs be. Whether we can determine it or no, it matters not, there is certainly a time when children begin to think, and their words and actions do assure us that they do so. When therefore they are capable of thought, of knowledge, of assent, can it rationally be supposed, they can be ignorant of those notions that nature has imprinted, were there any such ? Can it be imagined, with any appearance of reason, that they perceive the impressions from things without, and be at the same time ignorant of those characters which nature itself has taken care to stamp within ? Can they receive and assent to adventitious notions, and be ignorant of those which are supposed woven into the very principles of their being, and imprinted there in indelible characters, to be the foundation and guide of all their acquired knowledge, and future reasonings ? This would be, to make nature take pains to no purpose ; or, at least, to write very ill ; since its characters could not be read by those eyes, which saw other things very well ; and those are very ill supposed the clearest parts of truth, and the foundations of all our knowledge, which are not first known, and without which the undoubted knowledge of several other things may be had. The child certainly knows, that the nurse that feeds it, is neither the cat it plays with, nor the blackmoor it is

afraid of; that the wormseed or mustard it refuses, is not the apple or sugar it cries for; this it is certainly and undoubtedly assured of: but will any one say, it is by virtue of this principle, "that it is impossible for the same thing to be, and not to be," that it so firmly assents to these, and other parts of its knowledge? Or that the child has any notion or apprehension of that proposition at an age, wherein yet, it is plain, it knows a great many other truths? He that will say, children join these general abstract speculations with their sucking bottles and their rattles, may, perhaps, with justice, be thought to have more passion and zeal for his opinion, but less sincerity and truth, than one of that age.

§ 26. Though therefore there be several
 And so not innate. general propositions, that meet with constant and ready assent, as soon as proposed to men grown up, who have attained the use of more general and abstract ideas, and names standing for them; yet they not being to be found in those of tender years, who nevertheless know other things, they cannot pretend to universal assent of intelligent persons, and so by no means can be supposed innate: it being impossible, that any truth which is innate (if there were any such) should be unknown, at least to any one who knows any thing else: since, if there are innate truths, they must be innate thoughts; there being nothing a truth in the mind, that it has never thought on. Whereby it is evident, if there be any innate truths in the mind, they must necessarily be the first of any thought on; the first that appear there.

§ 27. That the general maxims, we are
 Not innate, because they appear least, where what is innate shows itself clearest. discoursing of, are not known to children, idiots, and a great part of mankind, we have already sufficiently proved; whereby it is evident, they have not an universal assent, nor are general impressions. But there is this farther argument in it against their being innate, that these characters, if they were native and original impressions, should appear fairest

and clearest in those persons in whom yet we find no footsteps of them: and it is, in my opinion, a strong presumption, that they are not innate, since they are least known to those, in whom, if they were innate, they must needs exert themselves with most force and vigour. For children, idiots, savages, and illiterate people, being of all others the least corrupted by custom, or borrowed opinions; learning and education having not cast their native thoughts into new moulds, nor, by superinducing foreign and studied doctrines, confounded those fair characters nature had written there; one might reasonably imagine, that in their minds these innate notions should lie open fairly to every one's view, as it is certain the thoughts of children do. It might very well be expected, that these principles should be perfectly known to naturals, which being stamped immediately on the soul (as these men suppose) can have no dependance on the constitutions or organs of the body, the only confessed difference between them and others. One would think, according to these men's principles, that all these native beams of light (were there any such) should in those who have no reserves, no arts of concealment, shine out in their full lustre, and leave us in no more doubt of their being there, than we are of their love of pleasure, and abhorrence of pain. But alas, amongst children, idiots, savages, and the grossly illiterate, what general maxims are to be found? what universal principles of knowledge? Their notions are few and narrow, borrowed only from those objects they have had most to do with, and which have made upon their senses the frequentest and strongest impressions. A child knows his nurse and his cradle, and by degrees the play-things of a little more advanced age: and a young savage has, perhaps, his head filled with love and hunting, according to the fashion of his tribe. But he that from a child untaught, or a wild inhabitant of the woods, will expect these abstract maxims and reputed principles of science, will, I fear, find himself mistaken. Such kind of general propositions are sel-

dom mentioned in the huts of Indians, much less are they to be found in the thoughts of children, or any impressions of them on the minds of naturals. They are the language and business of the schools and academies of learned nations, accustomed to that sort of conversation or learning, where disputes are frequent: these maxims being suited to artificial argumentation, and useful for conviction; but not much conducing to the discovery of truth, or advancement of knowledge. But of their small use for the improvement of knowledge, I shall have occasion to speak more at large, *l. 4, c. 7.*

Recapitulation. § 28. I know not how absurd this may seem to the masters of demonstration: and probably it will hardly down with any body at first hearing. I must therefore beg a little truce with prejudice, and the forbearance of censure, till I have been heard out in the sequel of this discourse, being very willing to submit to better judgments. And since I impartially search after truth, I shall not be sorry to be convinced that I have been too fond of my own notions; which I confess we are all apt to be, when application and study have warmed our heads with them.

Upon the whole matter, I cannot see any ground to think these two speculative maxims innate, since they are not universally assented to; and the assent they so generally find, is no other than what several propositions, not allowed to be innate, equally partake in with them; and since the assent that is given them, is produced another way, and comes not from natural inscription, as I doubt not but to make appear in the following discourse. And if these first principles of knowledge and science are found not to be innate, no other speculative maxims can (I suppose) with better right pretend to be so.

CHAP. III.

No Innate Practical Principles.

§ 1. IF those speculative maxims, where-
of we discoursed in the foregoing chapter,
have not an actual universal assent from
all mankind, as we there proved, it is much
more visible concerning practical principles,
that they come short of an universal recep-
tion : and I think it will be hard to instance
any one moral rule, which can pretend to so
general and ready an assent as, “ what is, is;” or to
be so manifest a truth as this, “ that it is impossible
“ for the same thing to be, and not to be.” Whereby it
is evident, that they are farther removed from a title to
be innate; and the doubt of their being native impres-
sions on the mind, is stronger against those moral prin-
ciples than the other. Not that it brings their truth
at all in question : they are equally true, though not
equally evident. Those speculative maxims carry their
own evidence with them; but moral principles require
reasoning and discourse, and some exercise of the mind,
to discover the certainty of their truth. They lie not
open as natural characters engraven on the mind;
which, if any such were, they must needs be visible by
themselves, and by their own light be certain and
known to every body. But this is no derogation to
their truth and certainty, no more than it is to the
truth or certainty of the three angles of a triangle being
equal to two right ones; because it is not so evident, as
“ the whole is bigger than a part;” nor so apt to be
assented to at first hearing. It may suffice, that these
moral rules are capable of demonstration; and there-
fore it is our own fault, if we come not to a certain
knowledge of them. But the ignorance wherein many
men are of them, and the slowness of assent wherewith
others receive them, are manifest proofs that they are

No moral
principles so
clear, and so
generally re-
ceived, as the
foremen-
tioned spe-
culative
maxims.

not innate, and such as offer themselves to their view without searching.

Faith and justice not owned as principles by all men. § 2. Whether there be any such moral principles, wherein all men do agree, I appeal to any, who have been but moderately conversant in the history of mankind, and looked abroad beyond the smoke of their own chimneys. Where is that practical truth, that is universally received without doubt or question, as it must be, if innate? Justice, and keeping of contracts, is that which most men seem to agree in. This is a principle, which is thought to extend itself to the dens of thieves, and the confederacies of the greatest villains; and they who have gone farthest towards the putting off of humanity itself, keep faith and rules of justice one with another. I grant that out-laws themselves do this one amongst another; but it is without receiving these as the innate laws of nature. They practise them as rules of convenience within their own communities: but it is impossible to conceive, that he embraces justice as a practical principle, who acts fairly with his fellow highwayman, and at the same time plunders or kills the next honest man he meets with. Justice and truth are the common ties of society; and therefore, even out-laws and robbers, who break with all the world besides, must keep faith and rules of equity amongst themselves, or else they cannot hold together. But will any one say, that those that live by fraud or rapine, have innate principles of truth and justice which they allow and assent to?

Objection. § 3. Perhaps it will be urged, that the tacit assent of their minds agrees to what Though men deny their practice contradicts. I answer, first, them in their I have always thought the actions of men practice, yet the best interpreters of their thoughts. But they admit them in their since it is certain, that most men's practices, and some men's open professions, answered. have either questioned or denied these principles, it is impossible to establish an universal consent, (though we should look for it only amongst grown men) without which it is impossible to conclude them

innate. Secondly, it is very strange and unreasonable to suppose innate practical principles, that terminate only in contemplation. Practical principles derived from nature are there for operation, and must produce conformity of action, not barely speculative assent to their truth, or else they are in vain distinguished from speculative maxims. Nature, I confess, has put into man a desire of happiness, and an aversion to misery: these indeed are innate practical principles, which (as practical principles ought) do continue constantly to operate and influence all our actions without ceasing: these may be observed in all persons and all ages, steady and universal; but these are inclinations of the appetite to good, not impressions of truth on the understanding. I deny not, that there are natural tendencies imprinted on the minds of men; and that, from the very first instances of sense and perception, there are some things that are grateful, and others unwelcome to them; some things, that they incline to, and others that they fly: but this makes nothing for innate characters on the mind, which are to be the principles of knowledge, regulating our practice. Such natural impressions on the understanding are so far from being confirmed hereby, that this is an argument against them; since, if there were certain characters imprinted by nature on the understanding, as the principles of knowledge, we could not but perceive them constantly operate in us and influence our knowledge, as we do those others on the will and appetite; which never cease to be the constant springs and motives of all our actions, to which we perpetually feel them strongly impelling us.

§ 4. Another reason that makes me doubt of any innate practical principles, is, that I think there cannot any one moral rule be proposed, whereof a man may not justly demand a reason: which would be perfectly ridiculous and absurd, if they were innate, or so much as self-evident; which every innate principle must needs be, and not need any proof to ascertain its truth, nor want any reason to gain it approbation. He would be thought void of common sense, who asked on the one

Moral rules
need a proof,
ergo not innate.

side, or on the other side went to give, a reason, why it is impossible for the same thing to be, and not to be. It carries its own light and evidence with it, and needs no other proof: he that understands the terms, assents to it for its own sake, or else nothing will ever be able to prevail with him to do it. But should that most unshaken rule of morality, and foundation of all social virtue, "that one should do as he would be done unto," be proposed to one who never heard it before, but yet is of capacity to understand its meaning, might he not without any absurdity ask a reason why? and were not he that proposed it bound to make out the truth and reasonableness of it to him? which plainly shows it not to be innate; for if it were, it could neither want nor receive any proof; but must needs (at least, as soon as heard and understood) be received and assented to, as an unquestionable truth, which a man can by no means doubt of. So that the truth of all these moral rules plainly depends upon some other antecedent to them, and from which they must be deduced; which could not be, if either they were innate, or so much as self-evident.

Instance in § 5. That men should keep their com-
keeping pacts, is certainly a great and undeniable
compacts. rule in morality. But yet, if a Christian,
who has the view of happiness and misery in another
life, be asked why a man must keep his word, he will
give this as a reason; because God, who has the power
of eternal life and death, requires it of us. But if an
Hobbit be asked why, he will answer, because the
public requires it, and the Leviathan will punish you,
if you do not. And if one of the old philosophers had
been asked, he would have answered, because it was
dishonest, below the dignity of a man, and opposite to
virtue, the highest perfection of human nature, to do
otherwise.

Virtue gene- § 6. Hence naturally flows the great va-
rally appro- riety of opinions concerning moral rules,
ved, not be- which are to be found among men, accord-
cause innate, ing to the different sorts of happiness they
but because profitable. have a prospect of, or propose to them-

selves: which could not be if practical principles were innate, and imprinted in our minds immediately by the hand of God. I grant the existence of God is so many ways manifest, and the obedience we owe him so congruous to the light of reason, that a great part of mankind give testimony to the law of nature; but yet I think it must be allowed, that several moral rules may receive from mankind a very general approbation, without either knowing or admitting the true ground of morality; which can only be the will and law of a God, who sees men in the dark, has in his hand rewards and punishments, and power enough to call to account the proudest offender. For God having, by an inseparable connexion, joined virtue and public happiness together, and made the practice thereof necessary to the preservation of society, and visibly beneficial to all with whom the virtuous man has to do; it is no wonder, that every one should not only allow, but recommend and magnify those rules to others, from whose observance of them he is sure to reap advantage to himself. He may, out of interest, as well as conviction, cry up that for sacred, which if once trampled on and profaned, he himself cannot be safe nor secure. This, though it takes nothing from the moral and eternal obligation which these rules evidently have; yet it shows that the outward acknowledgment men pay to them in their words, proves not that they are innate principles; nay, it proves not so much, as that men assent to them inwardly in their own minds, as the inviolable rules of their own practice: since we find that self-interest, and the conveniencies of this life, make many men own an outward profession and approbation of them, whose actions sufficiently prove, that they very little consider the law-giver that prescribed these rules, nor the hell that he has ordained for the punishment of those that transgress them.

§ 7. For, if we will not in civility allow too much sincerity to the professions of most men, but think their actions to be the interpreters of their thoughts, we shall find that they have no such internal veneration

Men's actions convince us that the rule of virtue is not their internal principle.

for these rules, nor so full a persuasion of their certainty and obligation. The great principle of morality, "to do as one would be done to," is more commended than practised. But the breach of this rule cannot be a greater vice, than to teach others, that it is no moral rule, nor obligatory, would be thought madness, and contrary to that interest men sacrifice to, when they break it themselves. Perhaps conscience will be urged as checking us for such breaches; and so the internal obligation and establishment of the rule be preserved.

Conscience
no proof of
any innate
moral rule. § 8. To which I answer, that I doubt not but, without being written on their hearts, many men may, by the same way that they come to the knowledge of other things, come to assent to several moral rules, and be convinced of their obligation. Others also may come to be of the same mind, from their education, company, and customs of their country; which persuasion, however got, will serve to set conscience on work, which is nothing else, but our own opinion or judgment of the moral rectitude or pravity of our own actions. And if conscience be a proof of innate principles, contraries may be innate principles; since some men, with the same bent of conscience, prosecute what others avoid.

Instances of
enormities
practised
without re-
morse. § 9. But I cannot see how any men should ever transgress those moral rules, with confidence and serenity, were they innate, and stamped upon their minds. View but an army at the sacking of a town, and see what observation, or sense of moral principles, or what touch of conscience for all the outrages they do. Robberies, murders, rapes, are the sports of men set at liberty from punishment and censure. Have there not been whole nations, and those of the most civilized people, amongst whom the exposing their children, and leaving them in the fields to perish by want or wild beasts, has been the practice, as little condemned or scrupled as the begetting them? Do they not still, in some countries, put them into the same graves with their mothers, if they die in child-birth; or dispatch them, if a pretended

astrologer declares them to have unhappy stars? And are there not places where, at a certain age, they kill or expose their parents without any remorse at all? In a part of Asia, the sick, when their case comes to be thought desperate, are carried out and laid on the earth, before they are dead; and left there, exposed to wind and weather, to perish without assistance or pity^a. It is familiar among the Mingrelians, a people professing Christianity, to bury their children alive without scruple^b. There are places where they eat their own children^c. The Caribbees were wont to geld their children, on purpose to fat and eat them^d. And Garcilasso de la Vega tells us of a people in Peru, which were wont to fat and eat the children they got on their female captives, whom they kept as concubines for that purpose; and when they were past breeding, the mothers themselves were killed too and eaten^e. The virtues, whereby the Tououpinambos believed they merited paradise, were revenge, and eating abundance of their enemies. They have not so much as a name for God^f, and have no religion, no worship. The saints, who are canonized amongst the Turks, lead lives, which one cannot with modesty relate. A remarkable passage to this purpose, out of the voyage of Baumgarten, which is a book not every day to be met with, I shall set down at large in the language it is published in. *Ibi (sc. prope Belbes in Egypto) vidimus sanctum unum Saracenicum inter arenarum cumulos, ita ut ex utero matris prodiit, nudum sedentem. Mos est, ut didicimus, Mahometistis, ut eos, qui amentes & sine ratione sunt, pro sanctis colant & venerentur. Insuper & eos, qui cum diu vitam egerint inquinatissimam, voluntariam demum pœnitentiam & paupertatem, sanctitate venerandos deputant. Ejusmodi verò genus hominum libertatem quandam effrœnem habent, domos quas volunt intrandi, edendi, bibendi, & quod majus est, concumbendi; ex quo concubitu si proles secuta fuerit, sancta similiter habetur. His ergo*

^a Gruber apud Thevenot, part 4. p. 13.
Thevenot, p. 38.

^b Lambert apud
^c Vossius de Nili Origine, c. 18, 19.

^d P. Mart. Dec. 1.

^e Hist. des Incas, l. 1. c. 12.

^f Lery,

c. 16, 216, 231.

hominibus dum vivunt, magnos exhibent honores; mortuis verò vel templa vel monumenta extruunt amplissima, eosque contingere ac sepelire maximæ fortunæ ducunt loco. Audivimus hæc dicta & dicenda per interpretem à Mucrelo nostro. Insuper sanctum illum, quem eo loco vidimus, publicitus apprimè commendari, eum esse hominem sanctum, divinum ac integritate præcipuum; eo quod, nec fæminarum unquam esset, nec puerorum, sed tantummodo asellarum concubitor atque mularum. Peregr. Baumgarten, l. 2. c. 1. p. 73. More of the same kind, concerning these precious saints amongst the Turks, may be seen in Pietro della Valle, in his letter of the 25th of January, 1616. Where then are those innate principles of justice, piety, gratitude, equity, chastity? Or, where is that universal consent, that assures us there are such inbred rules? Murders in duels, when fashion has made them honourable, are committed without remorse of conscience, nay, in many places, innocence in this case is the greatest ignominy. And if we look abroad, to take a view of men, as they are, we shall find, that they have remorse in one place, for doing or omitting that, which others, in another place, think they merit by.

Men have
contrary
practical
principles. § 10. He that will carefully peruse the history of mankind, and look abroad into the several tribes of men, and with indifference survey their actions, will be able to satisfy himself, that there is scarce that principle of morality to be named, or rule of virtue to be thought on (those only excepted that are absolutely necessary to hold society together, which commonly, too, are neglected betwixt distinct societies) which is not, somewhere or other, slighted and condemned by the general fashion of whole societies of men, governed by practical opinions and rules of living, quite opposite to others.

Whole nations reject
several moral rules. § 11. Here, perhaps, it will be objected, that it is no argument that the rule is not known, because it is broken. I grant the objection good, where men, though they transgress, yet disown not the law; where fear of shame, censure, or punishment, carries the mark of some awe it has upon them. But it is impossible to conceive, that a whole nation of

men should all publicly reject and renounce what every one of them, certainly and infallibly, knew to be a law: for so they must, who have it naturally imprinted on their minds. It is possible men may sometimes own rules of morality, which, in their private thoughts, they do not believe to be true, only to keep themselves in reputation and esteem amongst those, who are persuaded of their obligation. But it is not to be imagined, that a whole society of men should publicly and professedly disown, and cast off a rule, which they could not, in their own minds, but be infallibly certain was a law; nor be ignorant, that all men they should have to do with, knew it to be such: and therefore must every one of them apprehend from others, all the contempt and abhorrence due to one, who professes himself void of humanity; and one, who, confounding the known and natural measures of right and wrong, cannot but be looked on as the professed enemy of their peace and happiness. Whatever practical principle is innate, cannot but be known to every one to be just and good. It is therefore little less than a contradiction to suppose, that whole nations of men should, both in their professions and practice, unanimously and universally give the lie to what, by the most invincible evidence, every one of them knew to be true, right, and good. This is enough to satisfy us, that no practical rule, which is any where universally, and with public approbation or allowance, transgressed, can be supposed innate. But I have something farther to add, in answer to this objection.

§ 12. The breaking of a rule, say you, is no argument that it is unknown. I grant it: but the generally allowed breach of it any where, I say, is a proof that it is not innate. For example: let us take any of these rules, which being the most obvious deductions of human reason, and conformable to the natural inclination of the greatest part of men, fewest people have had the impudence to deny, or inconsideration to doubt of. If any can be thought to be naturally imprinted, none, I think, can have a fairer pretence to be innate than this; “parents, preserve and cherish your children.” When therefore you say, that

this is an innate rule, what do you mean? Either, that it is an innate principle, which, upon all occasions, excites and directs the actions of all men: or else, that it is a truth, which all men have imprinted on their minds, and which therefore they know and assent to. But in neither of these senses is it innate. First that it is not a principle which influences all men's actions, is what I have proved by the examples before cited: nor need we seek so far as Mingrelia or Peru, to find instances of such as neglect, abuse, nay and destroy their children; or look on it only as the more than brutality of some savage and barbarous nations, when we remember, that it was a familiar and uncondemned practice amongst the Greeks and Romans, to expose, without pity or remorse, their innocent infants. Secondly, that it is an innate truth, known to all men, is also false. For, "parents, preserve your children," is so far from an innate truth, that it is no truth at all; it being a command, and not a proposition, and so not capable of truth or falsehood. To make it capable of being assented to as true, it must be reduced to some such proposition as this: "it is the duty of parents to preserve their children." But what duty is, cannot be understood without a law; nor a law be known, or supposed, without a law-maker, or without reward and punishment: so that it is impossible that this, or any other practical principle, should be innate; i. e. be imprinted on the mind as a duty, without supposing the ideas of God, of law, of obligation, of punishment, of a life after this, innate: For that punishment follows not, in this life, the breach of this rule; and consequently, that it has not the force of a law in countries, where the generally allowed practice runs counter to it, is in itself evident. But these ideas (which must be all of them innate, if any thing as a duty be so) are so far from being innate, that it is not every studious or thinking man, much less every one that is born, in whom they are to be found clear and distinct; and that one of them, which of all others seems most likely to be innate, is not so, (I mean the idea of God) I think, in the next chapter, will appear very evident to any considering man.

§ 13. From what has been said, I think we may safely conclude, that whatever practical rule is, in any place, generally and with allowance broken, cannot be supposed innate; it being impossible that men should, without shame or fear, confidently and serenely break a rule, which they could not but evidently know, that God had set up, and would certainly punish the breach of (which they must, if it were innate) to a degree, to make it a very ill bargain to the transgressor. Without such a knowledge as this, a man can never be certain that any thing is his duty. Ignorance, or doubt of the law, hopes to escape the knowledge or power of the law-maker, or the like, may make men give way to a present appetite: but let any one see the fault, and the rod by it, and with the transgression, a fire ready to punish it; a pleasure tempting, and the hand of the Almighty visibly held up, and prepared to take vengeance (for this must be the case, where any duty is imprinted on the mind) and then tell me, whether it be possible for people with such a prospect, such a certain knowledge as this, wantonly, and without scruple, to offend against a law, which they carry about them in indelible characters, and that stares them in the face, whilst they are breaking it? whether men, at the same time that they feel in themselves the imprinted edicts of an omnipotent law-maker, can with assurance and gaiety slight and trample under foot his most sacred injunctions? and lastly, whether it be possible, that whilst a man thus openly bids defiance to this innate law and supreme law-giver, all the by-standers, yea, even the governors and rulers of the people, full of the same sense both of the law and law-maker, should silently connive, without testifying their dislike, or laying the least blame on it? Principles of actions indeed there are lodged in men's appetites, but these are so far from being innate moral principles, that if they were left to their full swing, they would carry men to the overturning of all morality. Moral laws are set as a curb and restraint to these exorbitant desires, which they cannot be but by rewards and punishments, that will overbalance the satisfaction any one shall propose to himself

in the breach of the law. If therefore any thing be imprinted on the minds of all men as a law, all men must have a certain and unavoidable knowledge, that certain and unavoidable punishment will attend the breach of it. For, if men can be ignorant or doubtful of what is innate, innate principles are insisted on, and urged to no purpose; truth and certainty (the things pretended) are not at all secured by them: but men are in the same uncertain, floating estate with, as without them. An evident indubitable knowledge of unavoidable punishment, great enough to make the transgression very uneligious, must accompany an innate law; unless, with an innate law, they can suppose an innate gospel too. I would not here be mistaken, as if, because I deny an innate law, I thought there were none but positive laws. There is a great deal of difference between an innate law, and a law of nature; between something imprinted on our minds in their very original, and something that we being ignorant of may attain to the knowledge of, by the use and due application of our natural faculties. And I think they equally forsake the truth, who, running into the contrary extremes, either affirm an innate law, or deny that there is a law knowable by the light of nature, i. e. without the help of positive revelation.

§ 14. The difference there is amongst Those who maintain innate practical principles, tell us not what they are. men in their practical principles, is so evident, that I think, I need say no more to evince, that it will be impossible to find any innate moral rules by this mark of general assent: and it is enough to make one suspect, that the supposition of such innate principles is but an opinion taken up at pleasure; since those who talk so confidently of them, are so sparing to tell us which they are. This might with justice be expected from those men who lay stress upon this opinion: and it gives occasion to distrust either their knowledge or charity, who, declaring that God has imprinted on the minds of men the foundations of knowledge, and the rules of living, are yet so little favourable to the information of their neighbours, or the quiet of

mankind, as not to point out to them which they are, in the variety men are distracted with. But, in truth, were there any such innate principles, there would be no need to teach them. Did men find such innate propositions stamped on their minds, they would easily be able to distinguish them from other truths, that they afterwards learned, and deduced from them; and there would be nothing more easy, than to know what, and how many they were. There could be no more doubt about their number, than there is about the number of our fingers; and it is like then, every system would be ready to give them us by tale. But since nobody, that I know, has ventured yet to give a catalogue of them, they cannot blame those who doubt of these innate principles; since even they who require men to believe that there are such innate propositions, do not tell us what they are. It is easy to foresee, that if different men of different sects should go about to give us a list of those innate practical principles, they would set down only such as suited their distinct hypotheses, and were fit to support the doctrines of their particular schools or churches: a plain evidence, that there are no such innate truths. Nay, a great part of men are so far from finding any such innate moral principles in themselves, that by denying freedom to mankind, and thereby making men no other than bare machines, they take away not only innate, but all moral rules whatsoever, and leave not a possibility to believe any such, to those who cannot conceive, how any thing can be capable of a law, that is not a free agent: and upon that ground, they must necessarily reject all principles of virtue, who cannot put morality and mechanism together; which are not very easy to be reconciled, or made consistent.

§ 15. When I had writ this, being informed, that my lord Herbert had, in his book *de Veritate*, assigned these innate principles, I presently consulted him, hoping to find, in a man of so great parts, something that might satisfy me in this point, and put an end to my enquiry. In his chapter *de Instinctu Naturali*, p. 72. edit. 1656, I met with these six marks of his *Notitiæ Communes*:

Lord Herbert's innate principles examined.

1. *Prioritas*. 2. *Independentia*. 3. *Universalitas*. 4. *Certitudo*. 5. *Necessitas*, i. e. as he explains it, *faciunt ad hominis conservationem*. 6. *Modus conformationis*, i. e. *Assensus nullâ interpositâ morâ*. And at the latter end of his little treatise, *De Religioni Laici*, he says this of these innate principles: *Adeo ut non uniuscujusvis religionis confinio arctentur quæ ubique vigent veritates. Sunt enim in ipsâ mente cælitus descriptæ, nullisque traditionibus, sive scriptis, sive non scriptis, obnoxia*, p. 3. And, *Veritates nostræ catholicæ quæ tanquam indubia Dei effata in foro interiori descriptæ*. Thus having given the marks of the innate principles or common notions, and asserted their being imprinted on the minds of men by the hand of God, he proceeds to set them down; and they are these: 1. *Esse aliquod supremum numen*. 2. *Numen illud coli debere*. 3. *Virtutem cum pietate conjunctam optimam esse rationem cultûs divini*. 4. *Resipiscendum esse à peccatis*. 5. *Dari præmium vel pœnam post hanc vitam transactam*. Though I allow these to be clear truths, and such as, if rightly explained, a rational creature can hardly avoid giving his assent to; yet I think he is far from proving them innate impressions *in foro interiori descriptæ*. For I must take leave to observe,

§ 16. First, that these five propositions are either not all, or more than all, those common notions writ on our minds by the finger of God, if it were reasonable to believe any at all to be so written: since there are other propositions, which, even by his own rules, have as just a pretence to such an original, and may be as well admitted for innate principles, as at least some of these five he enumerates, viz. “do as thou wouldest be done unto;” and, perhaps, some hundreds of others, when well considered.

§ 17. Secondly, that all his marks are not to be found in each of his five propositions, viz. his first, second, and third marks agree perfectly to neither of them; and the first, second, third, fourth, and sixth marks agree but ill to his third, fourth, and fifth propositions. For besides that we are assured from history, of many men, nay, whole nations, who doubt or disbelieve some or all of them; I cannot see how the third, viz. “that virtue

joined with piety is the best worship of God," can be an innate principle, when the name, or sound, virtue, is so hard to be understood ; liable to so much uncertainty in its signification ; and the thing it stands for, so much contended about, and difficult to be known. And therefore this cannot be but a very uncertain rule of human practice, and serve but very little to the conduct of our lives, and is therefore very unfit to be assigned as an innate practical principle. .

§ 18. For let us consider this proposition as to its meaning (for it is the sense, and not sound, that is, and must be the principle or common notion) viz. " virtue is the best worship of God ;" i. e. is most acceptable to him ; which if virtue be taken, as most commonly it is, for those actions, which, according to the different opinions of several countries, are accounted laudable, will be a proposition so far from being certain, that it will not be true. If virtue be taken for actions conformable to God's will, or to the rule prescribed by God, which is the true and only measure of virtue, when virtue is used to signify what is in its own nature right and good ; then this proposition, " that virtue is the best worship of God," will be most true and certain, but of very little use in human life : since it will amount to no more but this, viz. " that God is pleased with the doing of what he commands ;" which a man may certainly know to be true, without knowing what it is that God doth command ; and so be as far from any rule or principle of his actions, as he was before. And I think very few will take a proposition, which amounts to no more than this, viz. that God is pleased with the doing of what he himself commands, for an innate moral principle writ on the minds of all men (however true and certain it may be) since it teaches so little. Whosoever does so, will have reason to think hundreds of propositions, innate principles ; since there are many, which have as good a title as this, to be received for such, which nobody yet ever put into that rank of innate principles.

§ 19. Nor is the fourth proposition (viz. " men must repent of their sins") much more instructive, till what

those actions are, that are meant by sins, be set down. For the word *peccata*, or sins, being put, as it usually is, to signify in general ill actions, that will draw punishment upon the doers, what great principle of morality can that be, to tell us we should be sorry, and cease to do that which will bring mischief upon us, without knowing what those particular actions are, that will do so? Indeed, this is a very true proposition, and fit to be inculcated on, and received by those, who are supposed to have been taught, what actions in all kinds are sins; but neither this, nor the former, can be imagined to be innate principles, nor to be of any use, if they were innate, unless the particular measures and bounds of all virtues and vices, were engraven in men's minds, and were innate principles also; which, I think, is very much to be doubted. And therefore, I imagine, it will scarce seem possible, that God should engrave principles in men's minds, in words of uncertain signification, such as virtues and sins, which, amongst different men, stand for different things: nay, it cannot be supposed to be in words at all; which, being in most of these principles very general names, cannot be understood, but by knowing the particulars comprehended under them. And in the practical instances, the measures must be taken from the knowledge of the actions themselves, and the rules of them, abstracted from words, and antecedent to the knowledge of names; which rules a man must know, what language soever he chance to learn, whether English or Japan, or if he should learn no language at all, or never should understand the use of words, as happens in the case of dumb and deaf men. When it shall be made out, that men ignorant of words, or untaught by the laws and customs of their country, know that it is part of the worship of God, not to kill another man; not to know more women than one; not to procure abortion; not to expose their children; not to take from another what is his, though we want it ourselves, but, on the contrary, relieve and supply his wants; and whenever we have done the contrary, we ought to repent, be sorry, and resolve to do so no more: when, I say, all men shall be proved actually to know

and allow all these and a thousand other such rules, all which come under these two general words made use of above, viz. "virtutes & peccata," virtues and sins, there will be more reason for admitting these and the like, for common notions and practical principles. Yet, after all, universal consent (were there any in moral principles) to truths, the knowledge whereof may be attained otherwise, would scarce prove them to be innate; which is all I contend for.

§ 20. Nor will it be of much moment here to offer that very ready, but not very material answer (viz.) that the innate principles of morality, may, by education and custom, and the general opinion of those amongst whom we converse, be darkened, and at last quite worn out of the minds of men. Which assertion of theirs, if true, quite takes away the argument of universal consent, by which this opinion of innate principles is endeavoured to be proved: unless those men will think it reasonable, that their private persuasions, or that of their party, should pass for universal consent: a thing not unfrequently done, when men, presuming themselves to be the only masters of right reason, cast by the votes and opinions of the rest of mankind, as not worthy the reckoning. And then their argument stands thus: "the principles which all mankind allow for true, are innate; those that men of right reason admit, are the principles allowed by all mankind; we, and those of our mind, are men of reason; therefore we agreeing, our principles are innate;" which is a very pretty way of arguing, and a short cut to infallibility. For otherwise it will be very hard to understand, how there be some principles, which all men do acknowledge and agree in; and yet there are none of those principles, which are not by depraved custom, and ill education, blotted out of the minds of many men; which is to say, that all men admit, but yet many men do deny, and dissent from them. And indeed the supposition of such first principles will serve us to very little purpose; and we shall be as much at a loss with, as without them, if they may, by any human power,

Obj. Innate principles may be corrupted, answered.

such as is the will of our teachers, or opinions of our companions, be altered or lost in us; and notwithstanding all this boast of first principles and innate light, we shall be as much in the dark and uncertainty, as if there were no such thing at all: it being all one, to have no rule, and one that will warp any way; or, amongst various and contrary rules, not to know which is the right. But concerning innate principles, I desire these men to say, whether they can, or cannot, by education and custom, be blurred and blotted out: if they cannot, we must find them in all mankind alike, and they must be clear in every body: and if they may suffer variation from adventitious notions, we must then find them clearest and most perspicuous, nearest the fountain, in children and illiterate people who have received least impression from foreign opinions. Let them take which side they please, they will certainly find it inconsistent with visible matter of fact, and daily observation.

Contrary principles in the world. § 21. I easily grant, that there are great numbers of opinions, which, by men of different countries, educations, and tempers, are received and embraced as first and unquestionable principles; many whereof, both for their absurdity, as well as oppositions to one another, it is impossible should be true. But yet all those propositions, how remote soever from reason, are so sacred somewhere or other, that men even of good understanding in other matters, will sooner part with their lives, and whatever is dearest to them, than suffer themselves to doubt, or others to question, the truth of them.

How men commonly come by their principles. § 22. This, however strange it may seem, is that which every day's experience confirms; and will not, perhaps, appear so wonderful, if we consider the ways and steps by which it is brought about; and how really it may come to pass, that doctrines that have been derived from no better original than the superstition of a nurse, and the authority of an old woman, may by length of time, and consent of neighbours, grow up to the dignity of principles in religion or morality. For such, who

are careful (as they call it) to principle children well (and few there be who have not a set of those principles for them, which they believe in) instil into the unwary, and as yet unprejudiced understanding (for white paper receives any characters) those doctrines they would have them retain and profess. These being taught them as soon as they have any apprehension; and still as they grow up, confirmed to them, either by the open profession, or tacit consent, of all they have to do with; or at least by those, of whose wisdom, knowledge and piety, they have an opinion, who never suffer these propositions to be otherwise mentioned, but as the basis and foundation on which they build their religion and manners; come, by these means, to have the reputation of unquestionable, self-evident, and innate truths.

§ 23. To which we may add, that when men, so instructed, are grown up, and reflect on their own minds, they cannot find any thing more ancient there than those opinions which were taught them before their memory began to keep a register of their actions, or date the time when any new thing appeared to them; and therefore make no scruple to conclude, that those propositions, of whose knowledge they can find in themselves no original, were certainly the impress of God and nature upon their minds, and not taught them by any one else. These they entertain and submit to, as many do to their parents, with veneration; not because it is natural: nor do children do it, where they are not so taught: but because, having been always so educated, and having no remembrance of the beginning of this respect, they think it is natural.

§ 24. This will appear very likely, and almost unavoidable to come to pass, if we consider the nature of mankind, and the constitution of human affairs; wherein most men cannot live without employing their time in the daily labours of their callings; nor be at quiet in their minds without some foundation or principle to rest their thoughts on. There is scarce any one so floating and superficial in his understanding, who hath not some revered propositions, which are to

him the principles on which he bottoms his reasonings ; and by which he judgeth of truth and falsehood, right and wrong : which some, wanting skill and leisure, and others the inclination, and some being taught, that they ought not to examine ; there are few to be found who are not exposed by their ignorance, laziness, education, or precipitancy, to take them upon trust.

§ 25. This is evidently the case of all children and young folk ; and custom, a greater power than nature, seldom failing to make them worship for divine what she hath inured them to bow their minds, and submit their understandings to ; it is no wonder that grown men, either perplexed in the necessary affairs of life, or hot in the pursuit of pleasures, should not seriously sit down to examine their own tenets ; especially when one of their principles is, that principles ought not to be questioned. And had men leisure, parts, and will, who is there almost that dare shake the foundations of all his past thoughts and actions, and endure to bring upon himself the shame of having been a long time wholly in mistake and error ? who is there hardy enough to contend with the reproach which is every where prepared for those who dare venture to dissent from the received opinions of their country or party ? And where is the man to be found that can patiently prepare himself to bear the name of whimsical, sceptical, or atheist, which he is sure to meet with, who does in the least scruple any of the common opinions ? And he will be much more afraid to question those principles, when he shall think them, as most men do, the standards set up by God in his mind, to be the rule and touchstone of all other opinions. And what can hinder him from thinking them sacred, when he finds them the earliest of all his own thoughts, and the most revered by others ?

§ 26. It is easy to imagine how by these means it comes to pass, that men worship the idols that have been set up in their minds ; grow fond of the notions they have been long acquainted with there ; and stamp the characters of divinity upon absurdities and errors, become zealous votaries to bulls and monkeys ; and contend too, fight, and die in defence of their opinions : “ Dum

solos credit habendos esse deos, quos ipse colit." For since the reasoning faculties of the soul, which are almost constantly, though not always warily nor wisely, employed, would not know how to move, for want of a foundation and footing, in most men; who through laziness or avocation do not, or for want of time, or true helps, or for other causes, cannot penetrate into the principles of knowledge, and trace truth to its fountain and original; it is natural for them, and almost unavoidable, to take up with some borrowed principles: which being reputed and presumed to be the evident proofs of other things, are thought not to need any other proof themselves. Whoever shall receive any of these into his mind, and entertain them there, with the reverence usually paid to principles, never venturing to examine them, but accustoming himself to believe them, because they are to be believed, may take up from his education, and the fashions of his country, any absurdity for innate principles; and by long poring on the same objects, so dim his sight, as to take monsters lodged in his own brain, for the images of the Deity, and the workmanship of his hands.

§ 27. By this progress how many there are who arrive at principles, which they believe innate, may be easily observed, in the variety of opposite principles held and contended for by all sorts and degrees of men. And he that shall deny this to be the method, wherein most men proceed to the assurance they have of the truth and evidence of their principles, will perhaps find it a hard matter any other way to account for the contrary tenets, which are firmly believed, confidently asserted, and which great numbers are ready at any time to seal with their blood. And, indeed, if it be the privilege of innate principles, to be received upon their own authority, without examination, I know not what may not be believed, or how any one's principles can be questioned. If they may, and ought to be examined, and tried, I desire to know how first and innate principles can be tried; or at least it is reasonable to demand the marks and characters, whereby the genuine

Principles
must be
examined.

innate principles may be distinguished from others ; that so, amidst the great variety of pretenders, I may be kept from mistakes, in so material a point as this. When this is done, I shall be ready to embrace such welcome and useful propositions ; and till then I may with modesty doubt, since I fear universal consent, which is the only one produced, will scarce prove a sufficient mark to direct my choice, and assure me of any innate principles. From what has been said, I think it past doubt, that there are no practical principles wherein all men agree ; and therefore none innate. ✓

CHAP. IV.

Other Considerations concerning Innate Principles, both Speculative and Practical.

Principles not innate, unless their ideas be innate. § 1. HAD those, who would persuade us that there are innate principles, not taken them together in gross, but considered separately the parts out of which those propositions are made ; they would not, perhaps, have been so forward to believe that they were innate : since, if the ideas which made up those truths were not, it was impossible that the propositions made up of them should be innate, or the knowledge of them be born with us. For if the ideas be not innate, there was a time when the mind was without those principles ; and then they will not be innate, but be derived from some other original. For where the ideas themselves are not, there can be no knowledge, no assent, no mental or verbal propositions about them.

Ideas, especially those belonging to principles, not born with children. § 2. If we will attentively consider newborn children, we shall have little reason to think, that they bring many ideas into the world with them. For bating perhaps some faint ideas of hunger and thirst, and warmth, and some pains which they may have felt in

the womb, there is not the least appearance of any settled ideas at all in them; especially of ideas, answering the terms which make up those universal propositions, that are esteemed innate principles. One may perceive how, by degrees, afterwards, ideas come into their minds; and that they get no more, nor no other, than what experience, and the observation of things, that come in their way, furnish them with: which might be enough to satisfy us, that they are not original characters stamped on the mind.

§ 3. "It is impossible for the same thing to be, and not to be," is certainly (if there be any such) an innate principle. But can any one think, or will any one say, that impossibility and identity are two innate ideas? Are they such as all mankind have, and bring into the world with them? And are they those which are the first in children, and antecedent to all acquired ones? If they are innate, they must needs be so. Hath a child an idea of impossibility and identity, before it has of white or black, sweet or bitter? And is it from the knowledge of this principle, that it concludes, that wormwood rubbed on the nipple hath not the same taste that it used to receive from thence? Is it the actual knowledge of "*impossibile est idem esse, & non esse,*" that makes a child distinguish between its mother and a stranger? or, that makes it fond of the one, and fly the other? Or does the mind regulate itself and its assent by ideas, that it never yet had? Or the understanding draw conclusions from principles, which it never yet knew or understood? The names impossibility and identity stand for two ideas, so far from being innate, or born with us, that I think it requires great care and attention to form them right in our understandings. They are so far from being brought into the world with us, so remote from the thoughts of infancy and childhood; that, I believe, upon examination it will be found, that many grown men want them.

§ 4. If identity (to instance in that alone) ^{Identity, an} be a native impression, and consequently so ^{idea not in-} clear and obvious to us, that we must needs ^{nate.} know it even from our cradles; I would gladly be re-

solved by one of seven, or seventy years old, whether a man, being a creature consisting of soul and body, be the same man when his body is changed? Whether Euphorbus and Pythagoras, having had the same soul, were the same men, though they lived several ages asunder? Nay, whether the cock too, which had the same soul, were not the same with both of them? Whereby, perhaps, it will appear, that our idea of sameness is not so settled and clear, as to deserve to be thought innate in us. For if those innate ideas are not clear and distinct, so as to be universally known, and naturally agreed on, they cannot be subjects of universal and undoubted truths; but will be the unavoidable occasion of perpetual uncertainty. For, I suppose, every one's idea of identity will not be the same that Pythagoras, and others of his followers have: And which then shall be true? Which innate? Or are there two different ideas of identity, both innate?

§ 5. Nor let any one think, that the questions I have here proposed about the identity of man, are bare empty speculations; which if they were, would be enough to shew, that there was in the understandings of men no innate idea of identity. He that shall, with a little attention, reflect on the resurrection, and consider that divine justice will bring to judgment, at the last day, the very same persons, to be happy or miserable in the other, who did well or ill in this life; will find it perhaps not easy to resolve with himself, what makes the same man, or wherein identity consists; and will not be forward to think he, and every one, even children themselves, have naturally a clear idea of it.

Whole and part not innate ideas. § 6. Let us examine that principle of mathematics, viz. "that the whole is bigger than a part." This, I take it, is reckoned amongst innate principles. I am sure it has as good a title as any to be thought so; which yet nobody can think it to be, when he considers the ideas it comprehends in it, "whole and part," are perfectly relative: but the positive ideas, to which they properly and immediately belong, are extension and number, of which alone whole and part are relations. So that if whole

and part are innate ideas, extension and number must be so too; it being impossible to have an idea of a relation, without having any at all of the thing to which it belongs, and in which it is founded. Now whether the minds of men have naturally imprinted on them the ideas of extension and number, I leave to be considered by those, who are the patrons of innate principles.

§ 7. "That God is to be worshipped," Idea of worship not innate. is, without doubt, as great a truth as any can enter into the mind of man, and deserves the first place amongst all practical principles. But yet it can by no means be thought innate, unless the ideas of God and worship are innate. That the idea the term worship stands for, is not in the understanding of children, and a character stamped on the mind in its first original, I think, will be easily granted, by any one that considers how few there be, amongst grown men, who have a clear and distinct notion of it. And, I suppose, there cannot be any thing more ridiculous, than to say that children have this practical principle innate, "that God is to be worshipped.;" and yet, that they know not what that worship of God is, which is their duty. But to pass by this:

§ 8. If any idea can be imagined innate, Idea of God not innate. the idea of God may, of all others, for many reasons be thought so; since it is hard to conceive, how there should be innate moral principles, without an innate idea of a Deity: without a notion of a law-maker, it is impossible to have a notion of a law, and an obligation to observe it. Besides the atheists, taken notice of amongst the ancients, and left branded upon the records of history, hath not navigation discovered, in these later ages, whole nations at the bay of Soldania^a, in Brazil^b, in Boranday^c, and in the Caribbee islands, &c. amongst whom there was to be found no notion of a God, no religion? Nicholaus del Techo in literis, ex Paraquaria de Caaiguarum conver-

^a Roe apud Thevenot, p. 2.

^b Jo. de Lery, c. 16.

^c Martiniere 444. Terry 445 and 447. Ovington 442.

sione, has these words^d: “*Reperi eam gentem nulum nomen habere, quod Deum & hominis animam significet, nulla sacra habet, nulla idola.*” These are instances of nations where uncultivated nature has been left to itself, without the help of letters, and discipline, and the improvements of arts and sciences. But there are others to be found, who have enjoyed these in a very great measure; who yet, for want of a due application of their thoughts this way, want the idea and knowledge of God. It will, I doubt not, be a surprize to others, as it was to me, to find the Siamites of this number. But for this, let them consult the king of France’s late envoy thither^e, who gives no better account of the Chinese themselves^f. And if we will not believe La Loubere, the missionaries of China, even the Jesuits themselves, the great encomiasts of the Chinese, do all to a man agree, and will convince us that the sect of the literati, or learned, keeping to the old religion of China, and the ruling party there, are all of them atheists. Vid. Navarette, in the collection of voyages, vol. the first, and *Historia cultus Sinensium*. And perhaps if we should, with attention, mind the lives and discourses of people not so far off, we should have too much reason to fear, that many in more civilised countries have no very strong and clear impressions of a Deity upon their minds; and that the complaints of atheism, made from the pulpit, are not without reason. And though only some profligate wretches own it too bare-facedly now; yet perhaps we should hear more than we do of it from others, did not the fear of the magistrate’s sword, or their neighbour’s censure, tie up people’s tongues: which, were the apprehensions of punishment or shame taken away, would as openly proclaim their atheism, as their lives do^g.

^d *Relatio triplex de rebus Indicis Caaiguarum* 43. ^e La Loubere du Royaume de Siam, t. 1. c. 9. sect. 15, & c. 20, sect. 22. & c. 22. sect. 6. ^f *Ib.* t. 1. c. 20. sect. 4, & c. 23.

^g On this reasoning of the author against innate ideas, great blame hath been laid: because it seems to invalidate an argument commonly used to prove the being of a God, viz. universal consent: To which our

§ 9. But had all mankind, every where, a notion of a God (whereof yet history tells us the contrary) it would not from thence follow, that the idea of him was innate. For though no nation were to be found without a name, and some few dark notions of him: yet that would not prove them to be natural impressions on the mind, any more than the names of fire, or the sun, heat, or number, do prove the ideas they stand for to be innate: because the names of those things, and the ideas of them, are so universally received and known amongst mankind. Nor, on the contrary, is the want

author * answers, I think that the universal consent of mankind, as to the being of a God, amounts to thus much, that the vastly greater majority of mankind have in all ages of the world actually believed a God; that the majority of the remaining part have not actually disbelieved it; and consequently those who have actually opposed the belief of a God, have truly been very few. So that comparing those that have actually disbelieved, with those who have actually believed a God, their number is so inconsiderable, that in respect of this incomparably greater majority, of those who have owned the belief of a God, it may be said to be the universal consent of mankind.

This is all the universal consent which truth or matter of fact will allow; and therefore *all* that can be made use of to prove a God. But if any one would extend it farther, and speak deceitfully for God; if this universality should be urged in a strict sense, not for much the majority, but for a general consent of every one, even to a man, in all ages and countries; this would make it either no argument, or a perfectly useless and unnecessary one. For if any one deny a God, such a universality of consent is destroyed; and if nobody does deny a God, what need of arguments to convince atheists?

I would crave leave to ask your lordship, were there ever in the world any atheists or no? If there were not, what need is there of raising a question about the being of a God, when nobody questions it? What need of provisional arguments against a fault, from which mankind are so wholly free, and which, by an universal consent, they may be presumed to be secure from? If you say (as I doubt not but you will) that there have been atheists in the world, then your lordship's universal consent reduces itself to only a great majority; and then make that majority as great as you will, what I have said in the place quoted by your lordship, leaves it in its full force; and I have not said one word that does in the least invalidate this argument for a God. The argument I was upon there, was to show, that the idea of God was not innate; and to my purpose it was sufficient, if there were but a less number found in the world, who had no idea of God, than your lordship will allow there have been

* In his third letter to the bishop of Worcester.

of such a name, or the absence of such a notion out of men's minds, any argument against the being of a God; any more than it would be a proof that there was no load-stone in the world, because a great part of mankind had neither a notion of any such thing, nor a name for it; or be any show of argument to prove, that there are no distinct and various species of angels, or intelligent beings above us, because we have no ideas of such distinct species, or names for them: for men being furnished with words, by the common language of their own countries, can scarce avoid having some

of professed atheists; for whatsoever is innate, must be universal in the strictest sense. One exception is a sufficient proof against it. So that all that I said, and which was quite to another purpose, did not at all tend, nor can be made use of, to invalidate the argument for a Deity, grounded on such an universal consent, as your lordship, and all that build on it, must own; which is only a very disproportioned majority; such an universal consent my argument there neither affirms nor requires to be less than you will be pleased to allow it. Your lordship therefore might, without any prejudice to those declarations of good will and favour you have for the author of the "Essay of Human Understanding," have spared the mentioning his quoting authors that are in print, for matters of fact to quite another purpose, "as going about to invalidate the argument for a Deity, from the universal consent of mankind:" since he leaves that universal consent as entire and as large as you yourself do, or can own, or suppose it. But here I have no reason to be sorry that your lordship has given me this occasion for the vindication of this passage of my book; if there should be any one besides your lordship, who should so far mistake it, as to think it in the least invalidates the argument for a God, from the universal consent of mankind.

But because you question the credibility of those authors I have quoted, which you say were very ill chosen; I will crave leave to say, that he whom I relied on for his testimony concerning the Hottentots of Soldania, was no less a man than an ambassador from the king of England to the Great Mogul: of whose relation, monsieur Thevenot, no ill judge in the case, had so great an esteem, that he was at the pains to translate into French, and publish it in his (which is counted no injudicious) collection of travels. But to intercede with your lordship, for a little more favourable allowance of credit to Sir Thomas Roe's relation; Coore, an inhabitant of the country, who could speak English, assured Mr. Terry,* that they of Soldania had no God. But if he too have the ill luck to find no credit with you, I hope you will be a little more favourable to a divine of the church of England, now living, and admit of his testimony in confirmation of Sir Thomas Roe's. This worthy gentleman, in the relation of his voyage to Surat, printed but two years since, speaking of the same

* Terry's Voyage, p. 17, 23.

kind of ideas of those things, whose names, those they converse with, have occasion frequently to mention to them. And if they carry with it the notion of excellency, greatness, or something extraordinary : if apprehension and concernment accompany it ; if the fear of absolute and irresistible power set it on upon the mind, the idea is likely to sink the deeper, and spread the farther ; especially if it be such an idea as is agreeable to the common light of reason, and naturally deducible from every part of our knowledge, as that of a God is. For the visible marks of extraordinary wisdom and power appear so plainly in all the works of the creation, that a rational creature, who will but seriously reflect on them, cannot miss the discovery of a deity.

people, has these words : * “ They are sunk even below idolatry, are destitute of both priest and temple, and saving a little show of rejoicing, which is made at the full and new moon, have lost all kind of religious devotion. Nature has so richly provided for their convenience in this life, that they have drowned all sense of the God of it, and are grown quite careless of the next.”

But to provide against the clearest evidence of atheism in these people, you say, “ that the account given of them, makes them not fit to be a standard for the sense of mankind.” This, I think, may pass for nothing, till somebody be found, that makes them to be a standard for the sense of mankind. All the use I made of them was to show, that there were men in the world that had no innate idea of a God. But to keep something like an argument going (for what will not that do?) you go near denying those Cafers to be men. What else do these words signify ? “ a people so strangely bereft of common sense, that they can hardly be reckoned among mankind, as appears by the best accounts of the Cafers of Soldania, &c.” I hope, if any of them were called Peter, James, or John, it would be past scruple that they were men : however, Courwee, Wewena, and Cowsheda, and those others who had names, that had no places in your nomenclator, would hardly pass muster with your lordship.

My lord, I should not mention this, but that what you yourself say here, may be a motive to you to consider, that what you have laid such a stress on concerning the general nature of man, as a real being, and the subject of properties, amounts to nothing for the distinguishing of species ; since you yourself own that there may be individuals, wherein there is a common nature with a particular subsistence proper to each of them ; whereby you are so little able to know of which of the ranks or sorts they are, into which you say God has ordered beings, and which he hath distinguished by essential properties, that you are in doubt whether they ought to be reckoned among mankind or no.

* Mr. Ovington, p. 489.

And the influence that the discovery of such a being must necessarily have on the minds of all, that have but once heard of it, is so great, and carries such a weight of thought and communication with it, that it seems stranger to me, that a whole nation of men should be any where found so brutish, as to want the notion of a God; than that they should be without any notion of numbers, or fire.

§ 10. The name of God being once mentioned in any part of the world, to express a superior, powerful, wise, invisible being, the suitableness of such a notion to the principles of common reason, and the interest men will always have to mention it often, must necessarily spread it far and wide, and continue it down to all generations; though yet the general reception of this name, and some imperfect and unsteady notions conveyed thereby to the unthinking part of mankind, prove not the idea to be innate; but only that they, who made the discovery, had made a right use of their reason, thought maturely of the causes of things, and traced them to their original; from whom other less considering people having once received so important a notion, it could not easily be lost again.

§ 11. This is all could be inferred from the notion of a God, were it to be found universally in all the tribes of mankind, and generally acknowledged by men grown to maturity in all countries. For the generality of the acknowledging of a God, as I imagine, is extended no farther than that; which if it be sufficient to prove the idea of God innate, will as well prove the idea of fire innate; since, I think, it may be truly said, that there is not a person in the world, who has a notion of a God, who has not also the idea of fire. I doubt not, but if a colony of young children should be placed in an island where no fire was, they would certainly neither have any notion of such a thing, nor name for it, how generally soever it were received, and known in all the world besides: and perhaps too their apprehensions would be as far removed from any name, or notion of a God, till some one amongst them had employed his thoughts, to inquire into the constitution

and causes of things, which would easily lead him to the notion of a God; which having once taught to others, reason, and the natural propensity of their own thoughts, would afterwards propagate, and continue amongst them.

§ 12. Indeed it is urged, that it is suitable to the goodness of God to imprint upon the minds of men characters and notions of himself, and not to leave them in the dark and doubt in so grand a concernment; and also by that means to secure to himself the homage and veneration due from so intelligent a creature as man; and therefore he has done it.

Suitable to God's goodness, that all men should have an idea of him, therefore naturally imprinted by him, answered.

This argument, if it be of any force, will prove much more than those, who use it in this case, expect from it. For, if we may conclude, that God hath done for men all that men shall judge is best for them, because it is suitable to his goodness so to do; it will prove not only that God has imprinted on the minds of men an idea of himself, but that he hath plainly stamped there, in fair characters, all that men ought to know or believe of him, all that they ought to do in obedience to his will; and that he hath given them a will and affections conformable to it. This, no doubt, every one will think better for men, than that they should in the dark grope after knowledge, as St. Paul tells us all nations did after God, Acts xvii. 27. than that their wills should clash with their understandings, and their appetites cross their duty. The Romanists say, it is best for men, and so suitable to the goodness of God, that there should be an infallible judge of controversies on earth; and therefore there is one. And I, by the same reason, say, it is better for men that every man himself should be infallible. I leave them to consider, whether by the force of this argument they shall think, that every man is so. I think it a very good argument, to say, the infinitely wise God hath made it so; and therefore it is best. But it seems to me a little too much confidence of our own wisdom to say, "I think it best, and therefore God hath made it so;" and, in

the matter in hand, it will be in vain to argue from such a topic that God hath done so, when certain experience shows us that he hath not. But the goodness of God hath not been wanting to men without such original impressions of knowledge, or ideas stamped on the mind; since he hath furnished man with those faculties, which will serve for the sufficient discovery of all things requisite to the end of such a being. And I doubt not but to show that a man, by the right use of his natural abilities, may, without any innate principles, attain a knowledge of a God, and other things that concern him. God having endued man with those faculties of knowing which he hath, was no more obliged by his goodness to plant those innate notions in his mind, than that having given him reason, hands, and materials, he should build him bridges, or houses; which some people in the world, however, of good parts, do either totally want, or are but ill provided of, as well as others are wholly without ideas of God, and principles of morality; or at least have but very ill ones. The reason in both cases being, that they never employed their parts, faculties, and powers industriously that way, but contented themselves with the opinions, fashions, and things of their country, as they found them, without looking any farther. Had you or I been born at the bay of Soldania, possibly our thoughts and notions had not exceeded those brutish ones of the Hottentots that inhabit there; and had the Virginia king Apochancana been educated in England, he had been perhaps as knowing a divine, and as good a mathematician, as any in it. The difference between him and a more improved Englishman lying barely in this, that the exercise of his faculties was bounded within the ways, modes, and notions of his own country, and never directed to any other, or farther inquiries: and if he had not any idea of a God, it was only because he pursued not those thoughts that would have led him to it.

Ideas of
God various
in different
men.

§ 13. I grant, that if there were any idea to be found imprinted on the minds of men, we have reason to expect it should be the notion of his maker, as a mark God set on

his own workmanship, to mind man of his dependence and duty; and that herein should appear the first instances of human knowledge. But how late is it before any such notion is discoverable in children? And when we find it there, how much more does it resemble the opinion and notion of the teacher, than represent the true God? He that shall observe in children the progress whereby their minds attain the knowledge they have, will think that the objects they do first and most familiarly converse with, are those that make the first impressions on their understandings: nor will he find the least footsteps of any other. It is easy to take notice, how their thoughts enlarge themselves, only as they come to be acquainted with a greater variety of sensible objects, to retain the ideas of them in their memories; and to get the skill to compound and enlarge them, and several ways put them together. How by these means they come to frame in their minds an idea men have of a deity, I shall hereafter shew.

§ 14. Can it be thought, that the ideas men have of God are the characters and marks of himself, engraven on their minds by his own finger; when we see that in the same country, under one and the same name, men have far different, nay, often contrary and inconsistent ideas and conceptions of him? Their agreeing in a name, or sound, will scarce prove an innate notion of him.

§ 15. What true or tolerable notion of a deity could they have, who acknowledged and worshipped hundreds? Every deity that they owned above one was an infallible evidence of their ignorance of him, and a proof that they had no true notion of God, where unity, infinity, and eternity were excluded. To which if we add their gross conceptions of corporeity, expressed in their images and representations of their deities; the amours, marriages, copulations, lusts, quarrels, and other mean qualities attributed by them to their gods; we shall have little reason to think, that the heathen world, i. e. the greatest part of mankind, had such ideas of God in their minds, as he himself, out of care that they should not be mistaken about him, was author

of. And this universality of consent, so much argued, if it prove any native impressions, it will be only this, that God imprinted on the minds of all men, speaking the same language, a name for himself, but not any idea; since those people, who agreed in the name, had at the same time far different apprehensions about the thing signified. If they say, that the variety of deities, worshipped by the heathen world, were but figurative ways of expressing the several attributes of that incomprehensible being, or several parts of his providence: I answer, what they might be in the original, I will not here inquire: but that they were so in the thoughts of the vulgar, I think nobody will affirm. And he that will consult the voyage of the bishop of Beryte, c. 13. (not to mention other testimonies) will find, that the theology of the Siamites professedly owns a plurality of Gods: or, as the abbe de Choisy more judiciously remarks, in his *Journal du Voyage de Siam*, 1707, it consists properly in acknowledging no God at all.

If it be said, That wise men of all nations came to have true conceptions of the unity and infinity of the deity, I grant it. But then this,

First, Excludes universality of consent in any thing but the name; for those wise men being very few, perhaps one of a thousand, this universality is very narrow.

Secondly, It seems to me plainly to prove, that the truest and best notions men had of God were not imprinted, but acquired by thought and meditation, and a right use of their faculties; since the wise and considerate men of the world, by a right and careful employment of their thoughts and reason, attained true notions in this as well as other things; whilst the lazy and inconsiderate part of men, making far the greater number, took up their notions by chance, from common tradition and vulgar conceptions, without much beating their heads about them. And if it be a reason to think the notion of God innate, because all wise men had it, virtue too must be thought innate, for that also wise men have always had.

§ 16. This was evidently the case of all gentilism; nor hath even amongst jews, christians, and mahometans, who acknowledge but one God, this doctrine, and the care taken in those nations to teach men to have true notions of a God, prevailed so far, as to make men to have the same and the true ideas of him. How many, even amongst us, will be found, upon inquiry, to fancy him in the shape of a man sitting in heaven, and to have many other absurd and unfit conceptions of him? Christians, as well as Turks, have had whole sects owning and contending earnestly for it, and that the deity was corporeal, and of human shape: and though we find few among us who profess themselves Anthropomorphites, (though some I have met with that own it) yet, I believe, he that will make it his business, may find, amongst the ignorant and uninstructed christians, many of that opinion. Talk but with country people, almost of any age, or young people of almost any condition; and you shall find, that though the name of God be frequently in their mouths, yet the notions they apply this name to are so odd, low, and pitiful, that nobody can imagine they were taught by a rational man, much less that they were characters written by the finger of God himself. Nor do I see how it derogates more from the goodness of God, that he has given us minds unfurnished with these ideas of himself, than that he hath sent us into the world with bodies unclothed, and that there is no art or skill born with us: for, being fitted with faculties to attain these, it is want of industry and consideration in us, and not of bounty in him, if we have them not. It is as certain that there is a God, as that the opposite angles, made by the intersection of two straight lines, are equal. There was never any rational creature, that set himself sincerely to examine the truth of these propositions, that could fail to assent to them; though yet it be past doubt that there are many men, who, having not applied their thoughts that way, are ignorant both of the one and the other. If any one think fit to call this (which is the utmost of its extent) universal consent, such an one I easily allow; but such an

universal consent as this proves not the idea of God, any more than it does the idea of such angels, innate.

If the idea of God be not innate, no other can be supposed innate. § 17. Since then, though the knowledge of a God be the most natural discovery of human reason, yet the idea of him is not innate, as, I think, is evident from what has been said; I imagine there will scarce be any other idea found, that can pretend to it: since if God hath sent any impression, any character on the understanding of men, it is most reasonable to expect it should have been some clear and uniform idea of himself, as far as our weak capacities were capable to receive so incomprehensible and infinite an object. But our minds being at first void of that idea, which we are most concerned to have, it is a strong presumption against all other innate characters. I must own, as far as I can observe, I can find none, and would be glad to be informed by any other.

Idea of substance not innate. § 18. I confess there is another idea, which would be of general use for mankind to have, as it is of general talk, as if they had it; and that is the idea of substance, which we neither have, nor can have, by sensation or reflection. If nature took care to provide us any ideas, we might well expect they should be such, as by our own faculties we cannot procure to ourselves: but we see, on the contrary, that since by those ways, whereby our ideas are brought into our minds, this is not, we have no such clear idea at all, and therefore signify nothing by the word substance, but only an uncertain supposition of we know not what, i. e. of something whereof we have no particular distinct positive idea, which we take to be the substratum, or support, of those ideas we know.

No propositions can be innate, since no ideas are innate. § 19. Whatever then we talk of innate, either speculative or practical, principles, it may, with as much probability, be said, that a man hath 100*l.* sterling in his pocket, and yet denied, that he hath either penny, shilling, crown, or other coin, out of which the sum is to be made up, as to think that certain propositions

are innate, when the ideas about which they are can by no means be supposed to be so. The general reception and assent that is given doth not at all prove that the ideas expressed in them are innate: for in many cases, however the ideas came there, the assent to words expressing the agreement or disagreement of such ideas, will necessarily follow. Every one, that hath a true idea of God and worship, will assent to this proposition, "that God is to be worshipped," when expressed in a language he understands: and every rational man, that hath not thought on it to-day, may be ready to assent to this proposition to-morrow; and yet millions of men may be well supposed to want one or both those ideas to-day. For if we will allow savages and most country people to have ideas of God and worship, (which conversation with them will not make one forward to believe) yet I think few children can be supposed to have those ideas, which therefore they must begin to have some time or other; and then they will also begin to assent to that proposition, and make very little question of it ever after. But such an assent upon hearing no more proves the ideas to be innate, than it does that one born blind (with cataracts, which will be cured to-morrow) had the innate ideas of the sun, or light, or saffron, or yellow; because, when his sight is cleared, he will certainly assent to this proposition, "that the sun is lucid, or that saffron is yellow;" and therefore, if such an assent upon hearing cannot prove the ideas innate, it can much less the propositions made up of those ideas. If they have any innate ideas, I would be glad to be told what, and how many they are.

§ 20. To which let me add: If there be No innate ideas in the memory. any innate ideas, any ideas in the mind, which the mind does not actually think on, they must be lodged in the memory, and from thence must be brought into view by remembrance; i. e. must be known, when they are remembered, to have been perceptions in the mind before, unless remembrance can be without remembrance. For to remember is to perceive any thing with memory, or with a consciousness, that it was known or perceived before:

without this, whatever idea comes into the mind is new, and not remembered; this consciousness of its having been in the mind before being that which distinguishes remembering from all other ways of thinking. Whatever idea was never perceived by the mind, was never in the mind. Whatever idea is in the mind, is either an actual perception; or else, having been an actual perception, is so in the mind, that by the memory it can be made an actual perception again. Whenever there is the actual perception of an idea without memory, the idea appears perfectly new and unknown before to the understanding. Whenever the memory brings any idea into actual view, it is with a consciousness, that it had been there before, and was not wholly a stranger to the mind. Whether this be not so, I appeal to every one's observation; and then I desire an instance of an idea, pretended to be innate, which (*before any impression of it by ways hereafter to be mentioned*) any one could revive and remember as an idea he had formerly known; without which consciousness of a former perception there is no remembrance; and whatever idea comes into the mind without that consciousness is not remembered, or comes not out of the memory, nor can be said to be in the mind before that appearance: for what is not either actually in view, or in the memory, is in the mind no way at all, and is all one as if it had never been there. Suppose a child had the use of his eyes, till he knows and distinguishes colours; but then cataracts shut the windows, and he is forty or fifty years perfectly in the dark, and in that time perfectly loses all memory of the ideas of colours he once had. This was the case of a blind man I once talked with, who lost his sight by the small-pox when he was a child, and had no more notion of colours than one born blind. I ask, whether any one can say this man had then any ideas of colours in his mind, any more than one born blind? And I think nobody will say, that either of them had in his mind any idea of colours at all. His cataracts are couched, and then he has the ideas (which he remembers not) of colours, *de novo*, by his restored sight

conveyed to his mind, and that without any consciousness of a former acquaintance: and these now he can revive, and call to mind in the dark. In this case all these ideas of colours, which when out of view can be revived with a consciousness of a former acquaintance, being thus in the memory, are said to be in the mind. The use I make of this, is, that whatever idea, being not actually in view, is in the mind, is there only by being in the memory; and if it be not in the memory, it is not in the mind; and if it be in the memory, it cannot by the memory be brought into actual view, without a perception that it comes out of the memory; which is this, that it had been known before, and is now remembered. If therefore there be any innate ideas, they must be in the memory, or else no-where in the mind; and if they be in the memory, they can be revived without any impression from without; and whenever they are brought into the mind, they are remembered, i. e. they bring with them a perception of their not being wholly new to it. This being a constant and distinguishing difference between what is, and what is not in the memory, or in the mind; that what is not in the memory, whenever it appears there, appears perfectly new and unknown before; and what is in the memory, or in the mind, whenever it is suggested by the memory, appears not to be new, but the mind finds it in itself, and knows it was there before. By this it may be tried, whether there be any innate ideas in the mind, before impression from sensation or reflection. I would fain meet with the man, who when he came to the use of reason, or at any other time, remembered any one of them: and to whom, after he was born, they were never new. If any one will say, there are ideas in the mind, that are not in the memory: I desire him to explain himself, and make what he says intelligible.

§ 21. Besides what I have already said, Principles there is another reason why I doubt that not innate, neither these nor any other principles are because of little use or little certainty. I that am fully persuaded, that the infinitely wise God made all things in perfect wisdom, cannot satisfy myself why he

should be supposed to print upon the minds of men some universal principles; whereof those that are pretended innate, and concern speculation, are of no great use; and those that concern practice, not self-evident, and neither of them distinguishable from some other truths not allowed to be innate. For to what purpose should characters be graven on the mind by the finger of God, which are not clearer there than those which are afterwards introduced, or cannot be distinguished from them? If any one thinks there are such innate ideas and propositions, which by their clearness and usefulness are distinguishable from all that is adventitious in the mind, and acquired, it will not be a hard matter for him to tell us which they are, and then every one will be a fit judge whether they be so or no; since if there be such innate ideas and impressions, plainly different from all other perceptions and knowledge, every one will find it true in himself. Of the evidence of these supposed innate maxims I have spoken already; of their usefulness I shall have occasion to speak more hereafter.

Difference of men's discoveries depends upon the different application of their faculties. § 22. To conclude: some ideas forwardly offer themselves to all men's understandings; some sorts of truth result from any ideas, as soon as the mind puts them into propositions; other truths require a train of ideas placed in order, a due comparing of them, and deductions made with attention, before they can be discovered and assented to. Some of the first sort, because of their general and easy reception, have been mistaken for innate; but the truth is, ideas and notions are no more born with us than arts and sciences, though some of them indeed offer themselves to our faculties more readily than others, and therefore are more generally received: though that too be according as the organs of our bodies and powers of our minds happen to be employed: God having fitted men with faculties and means to discover, receive, and retain truths, according as they are employed. The great difference that is to be found in the notions of mankind is from the different use they put their faculties to; whilst some (and those the most) taking things upon trust, misemploy their power of assent, by lazily

enslaving their minds to the dictates and dominion of others in doctrines, which it is their duty carefully to examine, and not blindly, with an implicit faith, to swallow. Others, employing their thoughts only about some few things, grow acquainted sufficiently with them, attain great degrees of knowledge in them, and are ignorant of all other, having never let their thoughts loose in the search of other inquiries. Thus, that the three angles of a triangle are equal to two right ones, is a truth as certain as any thing can be, and I think more evident than many of those propositions that go for principles; and yet there are millions, however expert in other things, who know not this at all, because they never set their thoughts on work about such angles; and he that certainly knows this proposition, may yet be utterly ignorant of the truth of other propositions, in mathematicks itself, which are as clear and evident as this: because, in his search of those mathematical truths, he stopped his thoughts short, and went not so far. The same may happen concerning the notions we have of the being of a deity: for though there be no truth which a man may more evidently make out to himself than the existence of a God, yet he that shall content himself with things as he finds them in this world, as they minister to his pleasures and passions, and not make inquiry a little farther into their causes, ends, and admirable contrivances, and pursue the thoughts thereof with diligence and attention; may live long without any notion of such a being. And if any person hath by talk put such a notion into his head, he may perhaps believe it; but if he hath never examined it, his knowledge of it will be no perfecter than his, who having been told, that the three angles of a triangle are equal to two right ones, takes it upon trust, without examining the demonstration; and may yield his assent as a probable opinion, but hath no knowledge of the truth of it: which yet his faculties, if carefully employed, were able to make clear and evident to him. But this only by the by, to shew how much our knowledge depends upon the right use of those powers nature hath bestowed upon us, and how

little upon such innate principles, as are in vain supposed to be in all mankind for their direction; which all men could not but know, if they were there, or else they would be there to no purpose: and which since all men do not know, nor can distinguish from other adventitious truths, we may well conclude there are no such.

Men must think and know for themselves. § 23. What censure doubting thus of innate principles may deserve from men, who will be apt to call it, pulling up the old foundations of knowledge and certainty, I cannot tell; I persuade myself at least, that the way I have pursued, being conformable to truth, lays those foundations surer. This I am certain, I have not made it my business either to quit or follow any authority in the ensuing discourse: truth has been my only aim, and wherever that has appeared to lead, my thoughts have impartially followed, without minding whether the footsteps of any other lay that way or no. Not that I want a due respect to other men's opinions; but, after all, the greatest reverence is due to truth: and I hope it will not be thought arrogance to say, that perhaps we should make greater progress in the discovery of rational and contemplative knowledge, if we sought it in the fountain, in the consideration of things themselves, and made use rather of our own thoughts than other men's to find it: for I think we may as rationally hope to see with other men's eyes, as to know by other men's understandings. So much as we ourselves consider and comprehend of truth and reason, so much we possess of real and true knowledge. The floating of other men's opinions in our brains makes us not one jot the more knowing, though they happen to be true. What in them was science, is in us but opiniatrety; whilst we give up our assent only to reverend names, and do not, as they did, employ our own reason to understand those truths which gave them reputation. Aristotle was certainly a knowing man, but nobody ever thought him so because he blindly embraced, or confidently vented, the opinions of another. And if the taking up another's principles, without examining

them, made not him a philosopher, I suppose it will hardly make any body else so. In the sciences, every one has so much as he really knows and comprehends: what he believes only, and takes upon trust, are but shreds; which however well in the whole piece, make no considerable addition to his stock who gathers them. Such borrowed wealth, like fairy-money, though it were gold in the hand from which he received it, will be but leaves and dust when it comes to use.

§ 24. When men have found some general propositions, that could not be doubted of as soon as understood, it was, I know, a short and easy way to conclude them innate. This being once received, it eased the lazy from the pains of search, and stopped the inquiry of the doubtful concerning all that was once styled innate. And it was of no small advantage to those who affected to be masters and teachers, to make this the principle of principles, “that principles must not be questioned:” for having once established this tenet, that there are innate principles, it put their followers upon a necessity of receiving some doctrines as such; which was to take them off from the use of their own reason and judgment, and put them on believing and taking them upon trust, without farther examination: in which posture of blind credulity, they might be more easily governed by, and made useful to, some sort of men, who had the skill and office to principle and guide them. Nor is it a small power it gives one man over another, to have the authority to be the dictator of principles, and teacher of unquestionable truths: and to make a man swallow that for an innate principle, which may serve to his purpose who teacheth them: whereas had they examined the ways whereby men came to the knowledge of many universal truths, they would have found them to result in the minds of men from the being of things themselves, when duly considered; and that they were discovered by the application of those faculties, that were fitted by nature to receive and judge of them, when duly employed about them.

Conclusion. § 25. To shew how the understanding proceeds herein, is the design of the following discourse; which I shall proceed to, when I have first premised, that hitherto, to clear my way to those foundations, which I conceive are the only true ones whereon to establish those notions we can have of our own knowledge, it hath been necessary for me to give an account of the reasons I had to doubt of innate principles. And since the arguments which are against them do some of them rise from common received opinions, I have been forced to take several things for granted, which is hardly avoidable to any one, whose task is to shew the falsehood or improbability of any tenet; it happening in controversial discourses, as it does in assaulting of towns, where if the ground be but firm whereon the batteries are erected, there is no farther inquiry of whom it is borrowed, nor whom it belongs to, so it affords but a fit rise for the present purpose. But in the future part of this discourse, designing to raise an edifice uniform and consistent with itself, as far as my own experience and observation will assist me, I hope to erect it on such a basis, that I shall not need to shore it up with props and buttresses, leaning on borrowed or begged foundations; or at least, if mine prove a castle in the air, I will endeavour it shall be all of a piece, and hang together. Wherein I warn the reader not to expect undeniable cogent demonstrations, unless I may be allowed the privilege, not seldom assumed by others, to take my principles for granted: and then, I doubt not, but I can demonstrate too. All that I shall say for the principles I proceed on is, that I can only appeal to men's own unprejudiced experience and observation, whether they be true or no; and this is enough for a man who professes no more, than to lay down candidly and freely his own conjectures, concerning a subject lying somewhat in the dark, without any other design than an unbiassed inquiry after truth.

BOOK II.

CHAP. I.

Of Ideas in general, and their Original.

§ 1. EVERY man being conscious to him- self that he thinks, and that which his mind is applied about, whilst thinking, being the ideas that are there, it is past doubt, that men have in their minds several ideas, such as are those expressed by the words, Whiteness, Hardness, Sweetness, Thinking, Motion, Man, Elephant, Army, Drunkenness, and others. It is in the first place then to be inquired, how he comes by them. I know it is a received doctrine, that men have native ideas, and original characters, stamped upon their minds, in their very first being. This opinion I have, at large, examined already; and, I suppose, what I have said, in the foregoing book, will be much more easily admitted, when I have shewn, whence the understanding may get all the ideas it has, and by what ways and degrees they may come into the mind; for which I shall appeal to every one's own observation and experience.

§ 2. Let us then suppose the mind to be, as we say, white paper, void of all characters, without any ideas; how comes it to be furnished? Whence comes it by that vast store which the busy and boundless fancy of man has painted on it, with an almost endless variety? Whence has it all the materials of reason and knowledge? To this I answer, in one word, from experience; in all that our knowledge is founded, and from that it ultimately derives itself. Our observation employed either about external sensible objects, or about the internal operations of our minds, perceived and reflected on by ourselves, is that which supplies our understandings with all the materials of thinking.

These two are the fountains of knowledge, from whence all the ideas we have, or can naturally have, do spring.

The objects of sensation one source of ideas. § 3. First, Our senses, conversant about particular sensible objects, do convey into the mind several distinct perceptions of things, according to those various ways

wherein those objects do affect them: and thus we come by those ideas we have, of Yellow, White, Heat, Cold, Soft, Hard, Bitter, Sweet, and all those which we call sensible qualities; which when I say the senses convey into the mind, I mean, they from external objects convey into the mind what produces there those perceptions. This great source of most of the ideas we have, depending wholly upon our senses, and derived by them to the understanding, I call SENSATION.

The operations of our minds the other source of them. § 4. Secondly, The other fountain, from which experience furnisheth the understanding with ideas, is the perception of the operations of our own mind within us, as it is employed about the ideas it has got;

which operations, when the soul comes to reflect on and consider, do furnish the understanding with another set of ideas, which could not be had from things without; and such are Perception, Thinking, Doubting, Believing, Reasoning, Knowing, Willing, and all the different actings of our own minds; which we being conscious of and observing in ourselves, do from these receive into our understandings as distinct ideas, as we do from bodies affecting our senses. This source of ideas every man has wholly in himself; and though it be not sense, as having nothing to do with external objects, yet it is very like it, and might properly enough be called internal sense. But as I call the other sensation, so I call this REFLECTION, the ideas it affords being such only as the mind gets by reflecting on its own operations within itself. By reflection then, in the following part of this discourse, I would be understood to mean that notice which the mind takes of its own operations, and the manner of them; by reason whereof there come to be ideas of these operations in the understanding. These two, I say, viz. external

material things, as the objects of sensation; and the operations of our own minds within, as the objects of reflection; are to me the only originals from whence all our ideas take their beginnings. The term operations here I use in a large sense, as comprehending not barely the actions of the mind about its ideas, but some sort of passions arising sometimes from them, such as is the satisfaction or uneasiness arising from any thought.

§ 5. The understanding seems to me not to have the least glimmering of any ideas, which it doth not receive from one of these two. External objects furnish the mind with the ideas of sensible qualities, which are all those different perceptions they produce in us: and the mind furnishes the understanding with ideas of its own operations.

All our ideas are of the one or the other of these.

These, when we have taken a full survey of them and their several modes, combinations, and relations, we shall find to contain all our whole stock of ideas; and that we have nothing in our minds which did not come in one of these two ways. Let any one examine his own thoughts, and thoroughly search into his understanding; and then let him tell me, whether all the original ideas he has there, are any other than of the objects of his senses, or of the operations of his mind, considered as objects of his reflection; and how great a mass of knowledge soever he imagines to be lodged there, he will, upon taking a strict view, see that he has not any idea in his mind, but what one of these two have imprinted; though perhaps, with infinite variety compounded and enlarged by the understanding, as we shall see hereafter.

§ 6. He that attentively considers the *Observable* state of a child, at his first coming into *in children.* the world, will have little reason to think him stored with plenty of ideas, that are to be the matter of his future knowledge: It is by degrees he comes to be furnished with them. And though the ideas of obvious and familiar qualities imprint themselves before the

memory begins to keep a register of time or order, yet it is often so late before some unusual qualities come in the way, that there are few men that cannot recollect the beginning of their acquaintance with them: and if it were worth while, no doubt a child might be so ordered as to have but a very few even of the ordinary ideas, till he were grown up to a man. But all that are born into the world being surrounded with bodies that perpetually and diversly affect them; variety of ideas, whether care be taken of it or no, are imprinted on the minds of children. Light and colours are busy at hand every-where, when the eye is but open; sounds and some tangible qualities fail not to solicit their proper senses, and force an entrance to the mind: but yet, I think, it will be granted easily, that if a child were kept in a place where he never saw any other but black and white till he were a man, he would have no more ideas of scarlet or green, than he that from his childhood never tasted an oyster or a pineapple has of those particular relishes.

Men are differently furnished with these, according to the different objects they converse with. § 7. Men then come to be furnished with fewer or more simple ideas from without, according as the objects they converse with afford greater or less variety; and from the operations of their minds within, according as they more or less reflect on them. For though he that contemplates the operations of his mind cannot but have plain and clear ideas of them; yet unless he turns his thoughts that way, and considers them attentively, he will no more have clear and distinct ideas of all the operations of his mind, and all that may be observed therein, than he will have all the particular ideas of any landscape, or of the parts and motions of a clock, who will not turn his eyes to it, and with attention heed all the parts of it. The picture or clock may be so placed, that they may come in his way every day; but yet he will have but a confused idea of all the parts they are made up of, till he applies himself with attention to consider them each in particular.

§ 8. And hence we see the reason why it is pretty late before most children get ideas of the operations of their own minds; and some have not any very clear or perfect ideas of the greatest part of them all their lives: because though they pass there continually, yet, like floating visions, they make not deep impressions enough to leave in their mind clear, distinct, lasting ideas, till the understanding turns inward upon itself, reflects on its own operations, and makes them the objects of its own contemplation. Children when they come first into it, are surrounded with a world of new things, which, by a constant solicitation of their senses, draw the mind constantly to them, forward to take notice of new, and apt to be delighted with the variety of changing objects. Thus the first years are usually employed and diverted into looking abroad. Men's business in them is to acquaint themselves with what is to be found without: and so growing up in a constant attention to outward sensation, seldom make any considerable reflection on what passes within them till they come to be of riper years; and some scarce ever at all.

Ideas of reflection later, because they need attention.

§ 9. To ask at what time a man has first any ideas, is to ask when he begins to perceive; having ideas, and perception, being the same thing. I know it is an opinion, that the soul always thinks, and that it has the actual perception of ideas in itself constantly as long as it exists; and that actual thinking is as inseparable from the soul, as actual extension is from the body: which if true, to inquire after the beginning of a man's ideas is the same as to inquire after the beginning of his soul. For by this account soul and its ideas, as body and its extension, will begin to exist both at the same time.

The soul begins to have ideas when it begins to perceive.

§ 10. But whether the soul be supposed to exist antecedent to, or coeval with, or some time after the first rudiments of organization, or the beginnings of life in the body; I leave to be disputed by those who

The soul thinks not always; for this wants proofs.

have better thought of that matter. I confess myself to have one of those dull souls, that doth not perceive itself always to contemplate ideas; nor can conceive it any more necessary for the soul always to think, than for the body always to move: the perception of ideas being (as I conceive) to the soul, what motion is to the body: not its essence, but one of its operations. And therefore, though thinking be supposed ever so much the proper action of the soul, yet it is not necessary to suppose that it should be always thinking, always in action. That perhaps is the privilege of the infinite author and preserver of things, who never slumbers nor sleeps; but it is not competent to any finite being, at least not to the soul of man. We know certainly by experience that we sometimes think, and thence draw this infallible consequence, that there is something in us that has a power to think; but whether that substance perpetually thinks or no, we can be no farther assured than experience informs us. For to say that actual thinking is essential to the soul, and inseparable from it, is to beg what is in question, and not to prove it by reason; which is necessary to be done, if it be not a self-evident proposition. But whether this, "that the soul always thinks," be a self-evident proposition, that every body assents to at first hearing, I appeal to mankind. It is doubted whether I thought at all last night or no; the question being about a matter of fact, it is begging it to bring, as a proof for it, an hypothesis, which is the very thing in dispute: by which way one may prove any thing; and it is but supposing that all watches, whilst the balance beats, think; and it is sufficiently proved, and past doubt, that my watch thought all last night. But he that would not deceive himself, ought to build his hypothesis on matter of fact, and make it out by sensible experience, and not presume on matter of fact, because of his hypothesis; that is, because he supposes it to be so: which way of proving amounts to this, that I must necessarily think all last night, because another supposes I always think, though I myself cannot perceive that I always do so.

But men in love with their opinions may not only suppose what is in question, but allege wrong matter of fact. How else could any one make it an inference of mine, that a thing is not, because we are not sensible of it in our sleep? I do not say there is no soul in a man, because he is not sensible of it in his sleep: but I do say, he cannot think at any time waking or sleeping, without being sensible of it. Our being sensible of it is not necessary to any thing, but to our thoughts; and to them it is, and to them it will always be necessary, till we can think without being conscious of it.

§ 11. I grant that the soul in a waking It is not al- man is never without thought, because it is ways consci- the condition of being awake: but whether ous of it. sleeping without dreaming be not an affection of the whole man, mind as well as body, may be worth a waking man's consideration; it being hard to conceive, that any thing should think, and not be conscious of it. If the soul doth think in a sleeping man without being conscious of it, I ask, whether during such thinking it has any pleasure or pain, or be capable of happiness or misery? I am sure the man is not, any more than the bed or earth he lies on. For to be happy or miserable without being conscious of it, seems to me utterly inconsistent and impossible. Or if it be possible that the soul can, whilst the body is sleeping, have its thinking, enjoyments and concerns, its pleasure or pain, apart, which the man is not conscious of nor partakes in; it is certain that Socrates asleep and Socrates awake is not the same person: but his soul when he sleeps, and Socrates the man, consisting of body and soul when he is waking, are two persons; since waking Socrates has no knowledge of, or concernment for that happiness or misery of his soul which it enjoys alone by itself whilst he sleeps, without perceiving any thing of it; any more than he has for the happiness or misery of a man in the Indies, whom he knows not. For if we take wholly away all consciousness of our actions and sensations, especially of pleasure and pain, and the concernment that accompanies it, it will be hard to know wherein to place personal identity.

If a sleeping
man thinks
without
knowing it,
the sleeping
and waking
man are two
persons.

§ 12. "The soul, during sound sleep, thinks," say these men. Whilst it thinks and perceives, it is capable certainly of those of delight or trouble, as well as any other perceptions; and it must necessarily be conscious of its own perceptions. But it has all this apart; the sleeping man, it is plain, is conscious of nothing of all this. Let us suppose then the soul of Castor, while he is sleeping, retired from his body; which is no impossible supposition for the men I have here to do with, who so liberally allow life, without a thinking soul, to all other animals. These men cannot then judge it impossible, or a contradiction, that the body should live without the soul; nor that the soul should subsist and think, or have perception, even perception of happiness or misery, without the body. Let us then, as I say, suppose the soul of Castor separated, during his sleep, from his body, to think apart. Let us suppose too, that it chooses for its scene of thinking the body of another man, v. g. Pollux, who is sleeping without a soul: for if Castor's soul can think, whilst Castor is asleep, what Castor is never conscious of, it is no matter what place it chooses to think in. We have here then the bodies of two men with only one soul between them, which we will suppose to sleep and wake by turns; and the soul still thinking in the waking man, whereof the sleeping man is never conscious, has never the least perception. I ask then, whether Castor and Pollux, thus, with only one soul between them, which thinks and perceives in one what the other is never conscious of, nor is concerned for, are not two as distinct persons as Castor and Hercules, or as Socrates and Plato were? And whether one of them might not be very happy, and the other very miserable? Just by the same reason they make the soul and the man two persons, who make the soul think apart what the man is not conscious of. For I suppose nobody will make identity of person to consist in the soul's being united to the very same numerical particles of matter; for if that be necessary to identity, it will be impossible, in that constant flux of

the particles of our bodies, that any man should be the same person two days, or two moments together.

§ 13. Thus, methinks, every drowsy nod shakes their doctrine, who teach, that the soul is always thinking. Those at least, who do at any time sleep without dreaming, can never be convinced, that their thoughts are sometimes for four hours busy without their knowing of it; and if they are taken in the very act, waked in the middle of that sleeping contemplation, can give no manner of account of it.

Impossible to convince those that sleep without dreaming, that they think.

§ 14. It will perhaps be said, "that the soul thinks even in the soundest sleep, but the memory retains it not." That the soul in a sleeping man should be this moment busy a thinking, and the next moment in a waking man not remember nor be able to recollect one jot of all those thoughts, is very hard to be conceived, and would need some better proof than bare assertion to make it be believed. For who can without any more ado, but being barely told so, imagine, that the greatest part of men do, during all their lives, for several hours every day, think of something, which if they were asked, even in the middle of these thoughts, they could remember nothing at all of? Most men. I think, pass a great part of their sleep without dreaming. I once knew a man that was bred a scholar, and had no bad memory, who told me, he had never dreamed in his life till he had that fever he was then newly recovered of, which was about the five or six and twentieth year of his age. I suppose the world affords more such instances: at least every one's acquaintance will furnish him with examples enough of such, as pass most of their nights without dreaming.

That men dream without remembering it, in vain urged.

§ 15. To think often, and never to retain it so much as one moment, is a very useless sort of thinking: and the soul, in such a state of thinking, does very little, if at all, excel that of a looking-glass, which constantly receives variety of images, or ideas, but retains none; they disappear and vanish, and

Upon this hypothesis the thoughts of a sleeping man ought to be most rational.

there remain no footsteps of them; the looking-glass is never the better for such ideas, nor the soul for such thoughts. Perhaps it will be said, "that in a waking man the materials of the body are employed, and made use of, in thinking; and that the memory of thoughts is retained by the impressions that are made on the brain, and the traces there left after such thinking; but that in the thinking of the soul, which is not perceived in a sleeping man, there the soul thinks apart, and making no use of the organs of the body, leaves no impressions on it, and consequently no memory of such thoughts." Not to mention again the absurdity of two distinct persons, which follows from this supposition, I answer farther, that whatever ideas the mind can receive and contemplate without the help of the body, it is reasonable to conclude, it can retain without the help of the body too; or else the soul, or any separate spirit, will have but little advantage by thinking. If it has no memory of its own thoughts; if it cannot lay them up for its own use, and be able to recal them upon occasion; if it cannot reflect upon what is past, and make use of its former experiences, reasonings, and contemplations; to what purpose does it think? They, who make the soul a thinking thing, at this rate, will not make it a much more noble being, than those do, whom they condemn, for allowing it to be nothing but the subtlest parts of matter. Characters drawn on dust, that the first breath of wind effaces; or impressions made on a heap of atoms, or animal spirits, are altogether as useful, and render the subject as noble, as the thoughts of a soul that perish in thinking; that once out of sight are gone for ever, and leave no memory of themselves behind them. Nature never makes excellent things for mean or no uses; and it is hardly to be conceived, that our infinitely wise Creator should make so admirable a faculty as the power of thinking, that faculty which comes nearest the excellency of his own incomprehensible being, to be so idle and uselessly employed, at least a fourth part of its time here, as to think constantly, without remembering any of those thoughts, without doing

any good to itself or others, or being any way useful to any other part of the creation. If we will examine it, we shall not find, I suppose, the motion of dull and senseless matter, any where in the universe, made so little use of, and so wholly thrown away.

§ 16. It is true, we have sometimes instances of perception, whilst we are asleep; and retain the memory of those thoughts: but how extravagant and incoherent for the most part they are; how little conformable to the perfection and order of a rational being, those who are acquainted with dreams need not be told. This I would willingly be satisfied in, whether the soul, when it thinks thus apart, and as it were separate from the body, acts less rationally than when conjointly with it, or no. If its separate thoughts be less rational, then these men must say, that the soul owes the perfection of rational thinking to the body; if it does not, it is a wonder that our dreams should be, for the most part, so frivolous and irrational; and that the soul should retain none of its more rational soliloquies and meditations.

§ 17. Those who so confidently tell us, that "the soul always actually thinks," I would they would also tell us what those ideas are that are in the soul of a child, before, or just at the union with the body, before it hath received any by sensation. The dreams of sleeping men are, as I take it, all made up of the waking man's ideas, though for the most part oddly put together. It is strange if the soul has ideas of its own, that it derived not from sensation or reflection (as it must have, if it thought before it received any impressions from the body) that it should never, in its private thinking (so private, that the man himself perceives it not) retain any of them, the very moment it wakes out of them. and then make the man glad with new discoveries. Who can find it reasonable that the soul should, in its retirement, during sleep, have so many hours' thoughts, and yet never light on any of those ideas it borrowed not from sensation or reflection;

On this hypothesis the soul must have ideas not derived from sensation or reflection, of which there is no appearance.

If I think when I know it not, nobody else can know it.

or at least preserve the memory of none but such, which being occasioned from the body, must needs be less natural to a spirit? It is strange the soul should never once in a man's whole life recal over any of its pure native thoughts, and those ideas it had before it borrowed any thing from the body; never bring into the waking man's view any other ideas but what have a tang of the cask, and manifestly derive their original from that union. If it always thinks, and so had ideas before it was united, or before it received any from the body, it is not to be supposed but that during sleep it recollects its native ideas; and during that retirement from communicating with the body, whilst it thinks by itself, the ideas it is busied about should be, sometimes at least, those more natural and congenial ones which it had in itself, underived from the body, or its own operations about them: which, since the waking man never remembers, we must from this hypothesis conclude, either that the soul remembers something that the man does not; or else that memory belongs only to such ideas as are derived from the body, or the mind's operations about them.

How knows any one that the soul always thinks? For if it be not a self-evident proposition, it needs proof.

§ 18. I would be glad also to learn from these men, who so confidently pronounce, that the human soul, or which is all one, that a man always thinks, how they come to know it; nay, how they come to know that they themselves think, when they themselves do not perceive it. This, I am afraid, is to be sure without proofs; and to know, without perceiving: It is, I suspect, a confused notion taken up to serve an hypothesis; and none of those clear truths, that either their own evidence forces us to admit, or common experience makes it impudence to deny. For the most that can be said of it is, that it is impossible the soul may always think, but not always retain it in memory: and I say, it is as possible that the soul may not always think; and much more probable that it should sometimes not think, than that it should often think, and that a long while together, and not be conscious to itself the next moment after, that it had thought.

§ 19. To suppose the soul to think, and the man not to perceive it, is, as has been said, to make two persons in one man : and if one considers well these men's way of speaking, one should be led into a suspicion that they do so. For they who tell us that the soul always thinks, do never, that I remember, say that a man always thinks. Can the soul think, and not the man ? or a man think, and not be conscious of it ? This perhaps would be suspected of jargon in others. If they say, the man thinks always, but is not always conscious of it ; they may as well say, his body is extended without having parts. For it is altogether as intelligible to say, that a body is extended without parts, as that any thing thinks without being conscious of it, or perceiving that it does so. They who talk thus may, with as much reason, if it be necessary to their hypothesis, say, that a man is always hungry, but that he does not always feel it : whereas hunger consists in that very sensation, as thinking consists in being conscious that one thinks. If they say, that a man is always conscious to himself of thinking, I ask, how they know it. Consciousness is the perception of what passes in a man's own mind. Can another man perceive that I am conscious of any thing, when I perceive it not myself ? No man's knowledge here can go beyond his experience. Wake a man out of a sound sleep, and ask him, what he was that moment thinking of. If he himself be conscious of nothing he then thought on, he must be a notable diviner of thoughts that can assure him that he was thinking : may he not with more reason assure him he was not asleep ? This is something beyond philosophy ; and it cannot be less than revelation, that discovers to another thoughts in my mind, when I can find none there myself ; and they must needs have a penetrating sight, who can certainly see that I think, when I cannot perceive it myself, and when I declare that I do not ; and yet can see that dogs or elephants do not think, when they give all the demonstration of it imaginable, except only telling us that they do so. This some may suspect to be a step

That a man should be busy in thinking, and yet not retain it the next moment, very improbable.

beyond the Rosecrucians; it seeming easier to make one's self invisible to others, than to make another's thoughts visible to me, which are not visible to himself. But it is but defining the soul to be "a substance that always thinks," and the business is done. If such definition be of any authority, I know not what it can serve for, but to make many men suspect, that they have no souls at all, since they find a good part of their lives pass away without thinking. For no definitions, that I know, no suppositions of any sect, are of force enough to destroy constant experience; and perhaps it is the affectation of knowing beyond what we perceive, that makes so much useless dispute and noise in the world.

No ideas but from sensation or reflection, evident, if we observe children. § 20. I see no reason therefore to believe, that the soul thinks before the senses have furnished it with ideas to think on; and as those are increased and retained, so it comes, by exercise, to improve its faculty of thinking, in the several parts of it, as well as afterwards, by compounding those ideas, and reflecting on its own operations; it increases its stock, as well as facility, in remembering, imagining, reasoning, and other modes of thinking.

§ 21. He that will suffer himself to be informed by observation and experience, and not make his own hypothesis the rule of nature, will find few signs of a soul accustomed to much thinking in a new-born child, and much fewer of any reasoning at all. And yet it is hard to imagine, that the rational soul should think so much, and not reason at all. And he that will consider, that infants, newly come into the world, spend the greatest part of their time in sleep, and are seldom awake, but when either hunger calls for the teat, or some pain, (the most importunate of all sensations) or some other violent impression upon the body forces the mind to perceive, and attend to it: he, I say, who considers this, will, perhaps, find reason to imagine, that a fœtus in the mother's womb differs not much from the state of a vegetable; but passes the greatest part of its time without perception or thought, doing very

little in a place where it needs not seek for food, and is surrounded with liquor, always equally soft, and near of the same temper ; where the eyes have no light, and the ears, so shut up, are not very susceptible of sounds ; and where there is little or no variety, or change of objects to move the senses.

§ 22. Follow a child from its birth, and observe the alterations that time makes, and you shall find, as the mind by the senses comes more and more to be furnished with ideas, it comes to be more and more awake ; thinks more, the more it has matter to think on. After some time it begins to know the objects, which, being most familiar with it, have made lasting impressions. Thus it comes by degrees to know the persons it daily converses with, and distinguish them from strangers ; which are instances and effects of its coming to retain and distinguish the ideas the senses convey to it. And so we may observe how the mind, by degrees, improves in these, and advances to the exercise of those other faculties of enlarging, compounding, and abstracting its ideas, and of reasoning about them, and reflecting upon all these ; of which I shall have occasion to speak more hereafter.

§ 23. If it shall be demanded then, when a man begins to have any ideas ; I think the true answer is, when he first has any sensation. For since there appears not to be any ideas in the mind, before the senses have conveyed any in, I conceive that ideas in the understanding are coeval with sensation ; which is such an impression or motion, made in some part of the body, as produces some perception in the understanding. It is about these impressions made on our senses by outward objects, that the mind seems first to employ itself in such operations as we call perception, remembering, consideration, reasoning, &c.

§ 24. In time the mind comes to reflect on its own operations about the ideas got by sensation, and thereby stores itself with a new set of ideas, which I call ideas of reflection. These are the impressions that are made on our senses by outward objects that are extrinsical to the mind, and

The original
of all our
knowledge.

its own operations, proceeding from powers intrinsic and proper to itself; which when reflected on by itself, becoming also objects of its contemplation, are, as I have said, the original of all knowledge. Thus the first capacity of human intellect is, that the mind is fitted to receive the impressions made on it; either through the senses by outward objects; or by its own operations when it reflects on them. This is the first step a man makes towards the discovery of any thing, and the ground-work whereon to build all those notions which ever he shall have naturally in this world. All those sublime thoughts which tower above the clouds, and reach as high as heaven itself, take their rise and footing here: in all that good extent wherein the mind wanders, in those remote speculations, it may seem to be elevated with, it stirs not one jot beyond those ideas which sense or reflection have offered for its contemplation.

In the reception of simple ideas the understanding is for the most part passive. § 25. In this part the understanding is merely passive; and whether or no it will have these beginnings, and as it were materials of knowledge, is not in its own power. For the objects of our senses do, many of them, obtrude their particular ideas upon our minds whether we will or no; and the operations of our minds will not let us be without, at least, some obscure notions of them. No man can be wholly ignorant of what he does when he thinks. These simple ideas, when offered to the mind, the understanding can no more refuse to have, nor alter, when they are imprinted, nor blot them out, and make new ones itself, than a mirror can refuse, alter, or obliterate the images or ideas which the objects set before it do therein produce. As the bodies that surround us do diversely affect our organs, the mind is forced to receive the impressions, and cannot avoid the perception of those ideas that are annexed to them.

CHAP. II.

Of Simple Ideas.

§ 1. THE better to understand the nature, manner, and extent of our knowledge, one thing is carefully to be observed concerning the ideas we have ; and that is, that some of them are simple, and some complex.

Though the qualities that affect our senses are, in the things themselves, so united and blended, that there is no separation, no distance between them ; yet it is plain, the ideas they produce in the mind enter by the senses simple and unmixed. For though the sight and touch often take in from the same object, at the same time, different ideas ; as a man sees at once motion and colour ; the hand feels softness and warmth in the same piece of wax : yet the simple ideas, thus united in the same subject, are as perfectly distinct as those that come in by different senses : the coldness and hardness which a man feels in a piece of ice being as distinct ideas in the mind, as the smell and whiteness of a lily ; or as the taste of sugar, and smell of a rose. And there is nothing can be plainer to a man, than the clear and distinct perception he has of those simple ideas ; which, being each in itself uncompounded, contains in it nothing but one uniform appearance, or conception in the mind, and is not distinguishable into different ideas.

§ 2. These simple ideas, the materials of all our knowledge, are suggested and furnished to the mind only by those two ways above-mentioned, viz. sensation and reflection.

The mind can neither make nor destroy them.

* When the understanding is once stored with

* Against this, that the materials of all our knowledge are suggested and furnished to the mind only by sensation and reflection, the Bishop of Worcester makes use of the idea of substance in these words : " If the idea of substance be grounded upon plain and evident reason, then we must allow an idea of substance, which comes not in by sen-

these simple ideas, it has the power to repeat, compare, and unite them, even to an almost infinite variety ; and so can make at pleasure new complex ideas. But it is not in the power of the most exalted wit, or enlarged understanding, by any quickness or variety of thought, to invent or frame one new simple idea in the mind, not taken in by the ways aforementioned : nor can any force of the understanding destroy those that are there. The dominion of man, in this little world of his own understanding, being much-what the same as it is in the great world of visible things ; wherein his power, however managed by art and skill, reaches no farther than to compound and divide the materials that are

sation or reflection ; and so we may be certain of something which we have not by these ideas."

To which our author* answers: These words of your lordship's contain nothing as I see in them against me: for I never said that the general idea of substance comes in by sensation and reflection, or that it is a simple idea of sensation or reflection, though it be ultimately founded in them ; for it is a complex idea, made up of the general idea of something, or being, with the relation of a support to accidents. For general ideas come not into the mind by sensation or reflection, but are the creatures or inventions of the understanding, as I think I have shown ;† and also how the mind makes them from ideas which it has got by sensation and reflection ; and as to the ideas of relation, how the mind forms them, and how they are derived from, and ultimately terminate in ideas of sensation and reflection, I have likewise shown.

But that I may not be mistaken what I mean, when I speak of ideas of sensation and reflection, as the materials of all our knowledge ; give me leave, my lord, to set down here a place or two, out of my book, to explain myself ; as I thus speak of ideas of sensation and reflection :

‘ That these, when we have taken a full survey of them, and their several modes, and the compositions made out of them, we shall find to contain all our whole stock of ideas, and we have nothing in our minds, which did not come in one of these two ways.’‡ This thought, in another place, I express thus :

‘ These are the most considerable of those simple ideas which the mind has, and out of which is made all its other knowledge ; all which it receives by the two forementioned ways of sensation and reflection.’§ And,

‘ Thus I have, in a short draught, given a view of our original ideas, from whence all the rest are derived, and of which they are made up.’||

* In his first letter to the bishop of Worcester. † B. 3. c. 3. B. 2. c. 25. & c. 28. § 18. ‡ B. 2. c. 1. § 5. § B. 2. c. 7. § 10. || B. 2. c. 21. § 73.

made to his hand; but can do nothing towards the making the least particle of new matter, or destroying one atom of what is already in being. The same inability will every one find in himself, who shall go about to fashion in his understanding any simple idea, not received in by his senses from external objects, or by reflection from the operations of his own mind about them. I would have any one try to fancy any taste, which had never affected his palate; or frame the idea of a scent he had never smelt: and when he can do this, I will also conclude that a blind man hath ideas of colours, and a deaf man true distinct notions of sounds.

This, and the like, said in other places, is what I have thought concerning ideas of sensation and reflection, as the foundation and materials of all our ideas, and consequently of all our knowledge: I have set down these particulars out of my book, that the reader having a full view of my opinion herein, may the better see what in it is liable to your lordship's reprehension. For that your lordship is not very well satisfied with it, appears not only by the words under consideration, but by these also: "But we are still told, that our understanding can have no other ideas, but either from sensation or reflection."

Your lordship's argument, in the passage we are upon, stands thus: If the general idea of substance be grounded upon plain and evident reason, then we must allow an idea of substance, which comes not in by sensation or reflection. This is a consequence which, with submission, I think will not hold, viz. That reason and ideas are inconsistent; for if that supposition be not true, then the general idea of substance may be grounded on plain and evident reason; and yet it will not follow from thence, that it is not ultimately grounded on and derived from ideas which come in by sensation or reflection, and so cannot be said to come in by sensation or reflection.

To explain myself, and clear my meaning in this matter. All the ideas of all the sensible qualities of a cherry come into my mind by sensation; the ideas of perceiving, thinking, reasoning, knowing, &c. come into my mind by reflection. The ideas of these qualities and actions, or powers, are perceived by the mind, to be by themselves inconsistent with existence; or, as your lordship well expresses it, we find that we can have no true conception of any modes or accidents, but we must conceive a substratum, or subject, wherein they are, i. e. That they cannot exist or subsist of themselves. Hence the mind perceives their necessary connexion with inherence or being supported; which being a relative idea, superadded to the red colour in a cherry, or to thinking in a man, the mind frames the correlative idea of a support. For I never denied, that the mind could frame to itself ideas of relation, but have showed the quite contrary in my chapters about relation. But because a relation cannot be founded in nothing, or be the relation of nothing, and the thing here related as a supporter, or a support,

§ 3. This is the reason why, though we cannot believe it impossible to God to make a creature with other organs, and more ways to convey into the understanding the notice of corporeal things than those five, as they are usually counted, which he has given to man: yet I think, it is not possible for any one to imagine any other qualities in bodies, howsoever constituted, whereby they can be taken notice of, besides sounds, tastes, smells, visible and tangible qualities. And had mankind been made but with four senses, the qualities then, which are the object of the fifth sense, had been as far from our notice, imagination, and conception, as now any belonging to a sixth, seventh, or eighth sense, can

is not represented to the mind, by any clear and distinct idea; therefore the obscure and indistinct, vague idea of thing, or something, is all that is left to be the positive idea, which has the relation of a support, or substratum, to modes or accidents; and that general, indetermined idea of something is, by the abstraction of the mind, derived also from the simple ideas of sensation and reflection; and thus the mind, from the positive, simple ideas got by sensation and reflection, comes to the general, relative idea of substance, which, without these positive, simple ideas, it would never have.

This your lordship (without giving by detail all the particular steps of the mind in this business) has well expressed in this more familiar way: "We find we can have no true conception of any modes or accidents, but we must conceive a substratum, or subject, wherein they are; since it is a repugnancy to our conceptions of things, that modes or accidents should subsist by themselves."

Hence your lordship calls it the rational idea of substance; and says, "I grant that by sensation and reflection we come to know the powers and properties of things; but our reason is satisfied that there must be something beyond these, because it is impossible that they should subsist by themselves;" so that if this be that which your lordship means by the rational idea of substance, I see nothing there is in it against what I have said, that it is founded on simple ideas of sensation or reflection, and that it is a very obscure idea.

Your lordship's conclusion from your foregoing words is, "and so we may be certain of some things which we have not by those ideas;" which is a proposition, whose precise meaning, your lordship will forgive me, if I profess, as it stands there, I do not understand. For it is uncertain to me, whether your lordship means, we may certainly know the existence of something, which we have not by those ideas; or certainly know the distinct properties of something, which we have not by those ideas; or certainly know the truth of some proposition, which we have not by those ideas: for to be certain of something may signify either of these. But in which soever of these it be meant, I do not see how I am concerned in it.

possibly be : which, whether yet some other creatures, in some other parts of this vast and stupendous universe, may not have, will be a greater presumption to deny. He that will not set himself proudly at the top of all things, but will consider the immensity of this fabric, and the great variety that is to be found in this little and inconsiderable part of it which he has to do with, may be apt to think, that in other mansions of it there may be other and different intelligent beings, of whose faculties he has as little knowledge or apprehension, as a worm shut up in one drawer of a cabinet hath of the senses or understanding of a man : such variety and excellency being suitable to the wisdom and power of the maker. I have here followed the common opinion of man's having but five senses ; though, perhaps, there may be justly counted more : but either supposition serves equally to my present purpose.

CHAP. III.

Of Ideas of one Sense.

§ 1. THE better to conceive the ideas ^{Division of} we receive from sensation, it may not be ^{simple} amiss for us to consider them, in reference ^{ideas.} to the different ways whereby they make their approaches to our minds, and make themselves perceivable by us.

First, Then, there are some which come into our minds by one sense only.

Secondly, There are others that convey themselves into the mind by more senses than one.

Thirdly, Others that are had from reflection only.

Fourthly, There are some that make themselves way, and are suggested to the mind by all the ways of sensation and reflection.

We shall consider them apart under their several heads.

Ideas of one sense, as colours, of seeing; sound, of hearing; &c.

First, There are some ideas which have admittance only through one sense, which is peculiarly adapted to receive them. Thus light and colours, as white, red, yellow, blue, with their several degrees or shades and mixtures, as green, scarlet, purple, sea-green, and the rest, come in only by the eyes: all kinds of noises, sounds, and tones, only by the ears: and several tastes and smells, by the nose and palate. And if these organs, or the nerves, which are the conduits to convey them from without to their audience in the brain, the mind's presence-room (as I may so call it) are any of them so disorder'd, as not to perform their functions, they have no postern to be admitted by; no other way to bring themselves into view, and be perceived by the understanding.

The most considerable of those belonging to the touch are heat and cold, and solidity: all the rest, consisting almost wholly in the sensible configuration, as smooth and rough, or else more or less firm adhesion of the parts, as hard and soft, tough and brittle, are obvious enough.

Few simple ideas have names.

§ 2. I think, it will be needless to enumerate all the particular simple ideas, belonging to each sense. Nor indeed is it possible, if we would; there being a great many more of them belonging to most of the senses, than we have names for. The variety of smells, which are as many almost, if not more, than species of bodies in the world, do most of them want names. Sweet and stinking commonly serve our turn for these ideas, which in effect is little more than to call them pleasing or displeasing; though the smell of a rose and violet, both sweet, are certainly very distinct ideas. Nor are the different tastes, that by our palates we receive ideas of, much better provided with names. Sweet, bitter, sour, harsh, and salt, are almost all the epithets we have to denominate that numberless variety of relishes, which are to be found distinct, not only in almost every sort of creatures, but in the different parts of the same plant, fruit, or animal. The same may be said of colours and sounds. I shall therefore, in the account of

simple ideas I am here giving, content myself to set down only such, as are most material to our present purpose, or are in themselves less apt to be taken notice of, though they are very frequently the ingredients of our complex ideas, amongst which, I think, I may well account solidity; which therefore I shall treat of in the next chapter.

CHAP. IV.

Of Solidity.

§ 1. THE idea of solidity we receive by We receive
our touch; and it arises from the resist- this idea
ance which we find in body, to the en- from touch.
trance of any other body into the place it possesses,
till it has left it. There is no idea which we receive
more constantly from sensation, than solidity. Whe-
ther we move or rest, in what posture soever we are,
we always feel something under us that supports us, and
hinders our farther sinking downwards; and the bodies
which we daily handle make us perceive, that, whilst
they remain between them, they do by an insurmount-
able force hinder the approach of the parts of our hands
that press them. That which thus hinders the approach
of two bodies, when they are moved one towards an-
other, I call solidity. I will not dispute, whether this
acceptation of the word solid be nearer to its original
signification, than that which mathematicians use it in:
it suffices, that I think the common notion of solidity
will allow, if not justify, this use of it; but, if any
one think it better to call it impenetrability, he has my
consent. Only I have thought the term solidity the
more proper to express this idea, not only because of
its vulgar use in that sense, but also because it carries
something more of positive in it than impenetrability,
which is negative, and is perhaps more a consequence
of solidity, than solidity itself. This, of all other,

seems the idea most intimately connected with and essential to body, so as no-where else to be found or imagined, but only in matter. And though our senses take no notice of it, but in masses of matter, of a bulk sufficient to cause a sensation in us; yet the mind, having once got this idea from such grosser sensible bodies, traces it farther; and considers it, as well as figure, in the minutest particle of matter that can exist: and finds it inseparably inherent in body, wherever or however modified.

§ 2. This is the idea which belongs to Solidity fills body, whereby we conceive it to fill space. space.

The idea of which filling of space is, that, where we imagine any space taken up by a solid substance, we conceive it so to possess it, that it excludes all other solid substances; and will for ever hinder any other two bodies, that move towards one another in a straight line, from coming to touch one another, unless it removes from between them, in a line not parallel to that which they move in. This idea of it the bodies which we ordinarily handle sufficiently furnish us with.

§ 3. This resistance, whereby it keeps Distinct from space. other bodies out of the space which it possesses, is so great, that no force, how great soever, can surmount it. All the bodies in the world, pressing a drop of water on all sides, will never be able to overcome the resistance which it will make, soft as it is, to their approaching one another, till it be removed out of their way: whereby our idea of solidity is distinguished both from pure space, which is capable neither of resistance nor motion; and from the ordinary idea of hardness. For a man may conceive two bodies at a distance, so as they may approach one another, without touching or displacing any solid thing, till their superficies come to meet: whereby, I think, we have the clear idea of space without solidity. For (not to go so far as annihilation of any particular body) I ask, whether a man cannot have the idea of the motion of one single body alone without any other succeeding immediately into its place? I think it is evident he can: the idea of motion in one body no more including the

idea of motion in another, than the idea of a square figure in one body includes the idea of a square figure in another. I do not ask, whether bodies do so exist that the motion of one body cannot really be without the motion of another? To determine this either way, is to beg the question for or against a vacuum. But my question is, whether one cannot have the idea of one body moved whilst others are at rest? And I think this no one will deny. If so, then the place it deserted gives us the idea of pure space without solidity, whereinto any other body may enter, without either resistance or protrusion of any thing. When the sucker in a pump is drawn, the space it filled in the tube is certainly the same whether any other body follows the motion of the sucker or not: nor does it imply a contradiction that, upon the motion of one body, another that is only contiguous to it, should not follow it. The necessity of such a motion is built only on the supposition that the world is full, but not on the distinct ideas of space and solidity: which are as different as resistance and not resistance; protrusion and not protrusion. And that men have ideas of space without a body, their very disputes about a vacuum plainly demonstrate; as is showed in another place.

§ 4. Solidity is hereby also differenced From hardness, in that solidity consists in ^{ness.} repletion, and so an utter exclusion of other bodies out of the space it possesses; but hardness, in a firm cohesion of the parts of matter, making up masses of a sensible bulk, so that the whole does not easily change its figure. And indeed, hard and soft are names that we give to things only in relation to the constitutions of our own bodies; that being generally called hard by us, which will put us to pain sooner than change figure by the pressure of any part of our bodies; and that on the contrary soft, which changes the situation of its parts upon an easy and unpainful touch.

But this difficulty of changing the situation of the sensible parts amongst themselves, or of the figure of the whole, gives no more solidity to the hardest body in the world, than to the softest; nor is an adamant

one jot more solid than water. For though the two flat sides of two pieces of marble will more easily approach each other, between which there is nothing but water or air, than if there be a diamond between them: yet it is not that the parts of the diamond are more solid than those of water, or resist more; but because, the parts of water being more easily separable from each other, they will, by a side motion, be more easily removed, and give way to the approach of the two pieces of marble. But if they could be kept from making place by that side-motion, they would eternally hinder the approach of these two pieces of marble as much as the diamond; and it would be as impossible by any force to surmount their resistance, as to surmount the resistance of the parts of a diamond. The softest body in the world will as invincibly resist the coming together of any other two bodies, if it be not put out of the way, but remain between them, as the hardest that can be found or imagined. He that shall fill a yielding soft body well with air or water, will quickly find its resistance; and he that thinks that nothing but bodies that are hard can keep his hands from approaching one another, may be pleased to make a trial with the air inclosed in a foot-ball. The experiment, I have been told, was made at Florence, with a hollow globe of gold filled with water and exactly closed, which farther shows the solidity of so soft a body as water. For the golden globe thus filled being put into a press which was driven by the extreme force of screws, the water made itself way through the pores of that very close metal; and finding no room for a nearer approach of its particles within, got to the outside, where it rose like a dew, and so fell in drops, before the sides of the globe could be made to yield to the violent compression of the engine that squeezed it.

On solidity depend im- pulse, resist-
ance, and protrusion.

§ 5. By this idea of solidity, is the extension of body distinguished from the extension of space; the extension of body being nothing but the cohesion or continuity of solid, separable, moveable parts; and the extension of space, the continuity of unsolid, inse-

parable, and immoveable parts. Upon the solidity of bodies also depend their mutual impulse, resistance, and protrusion. Of pure space then, and solidity, there are several (amongst which I confess myself one) who persuade themselves they have clear and distinct ideas; and that they can think on space, without any thing in it that resists or is protruded by body. This is the idea of pure space, which they think they have as clear, as any idea they can have of the extension of body; the idea of the distance between the opposite parts of a concave superficies being equally as clear without as with the idea of any solid parts between: and on the other side they persuade themselves, that they have, distinct from that of pure space, the idea of something that fills space, that can be protruded by the impulse of other bodies, or resist their motion. If there be others that have not these two ideas distinct, but confound them, and make but one of them; I know not how men, who have the same idea under different names, or different ideas under the same name, can in that case talk with one another; any more than a man, who, not being blind or deaf, has distinct ideas of the colour of scarlet, and the sound of a trumpet, could discourse concerning scarlet colour with the blind man I mention in another place, who fancied that the idea of scarlet was like the sound of a trumpet.

§ 6. If any one ask me, what this so- What it is. lidity is? I send him to his senses to inform him: let him put a flint or a foot-ball between his hands, and then endeavour to join them, and he will know. If he thinks this not a sufficient explication of solidity, what it is, and wherein it consists; I promise to tell him what it is, and wherein it consists, when he tells me what thinking is, or wherein it consists; or explains to me what extension or motion is, which perhaps seems much easier. The simple ideas we have are such as experience teaches them us, but if, beyond that, we endeavour by words to make them clearer in the mind, we shall succeed no better, than if we went about to clear up the darkness of a blind man's

mind by talking; and to discourse into him the ideas of light and colours. The reason of this I shall show in another place.

CHAP. V.

Of Simple Ideas of divers Senses.

THE ideas we get by more than one sense are of space, or extension, figure, rest, and motion; for these make perceivable impressions, both on the eyes and touch: and we can receive and convey into our minds the ideas of the extension, figure, motion, and rest of bodies, both by seeing and feeling. But having occasion to speak more at large of these in another place, I here only enumerate them.

CHAP. VI.

Of Simple Ideas of Reflection.

Simple ideas are the operations of the mind about its other ideas. § 1. The mind, receiving the ideas, mentioned in the foregoing chapters, from without, when it turns its view inward upon itself, and observes its own actions about those ideas it has, takes from thence other ideas, which are as capable to be the objects of its contemplation as any of those it received from foreign things.

The idea of perception, and idea of willing, we have from reflection. § 2. The two great and principal actions of the mind, which are most frequently considered, and which are so frequent, that every one that pleases may take notice of them in himself, are these two: Perception or Thinking; and Volition, or Willing.

The power of thinking is called the understanding, and the power of volition is called the will ; and these two powers or abilities in the mind are denominated faculties. Of some of the modes of these simple ideas of reflection, such as are Remembrance, Discerning, Reasoning, Judging, Knowledge, Faith, &c. I shall have occasion to speak hereafter.

CHAP. VII.

Of Simple Ideas of both Sensation and Reflection.

§ 1. THERE be other simple ideas which convey themselves into the mind by all the ways of sensation and reflection, viz. Pleasure or Delight, and its opposite, Pain or Uneasiness, Power, Existence, Unity.

§ 2. Delight or uneasiness, one or other of them, join themselves to almost all our ideas, both of sensation and reflection ; and there is scarce any affection of our senses from without, any retired thought of our mind within, which is not able to produce in us pleasure or pain. By pleasure and pain I would be understood to signify whatsoever delights or molests us most ; whether it arises from the thoughts of our minds, or any thing operating on our bodies. For whether we call it satisfaction, delight, pleasure, happiness, &c. on the one side ; or uneasiness, trouble, pain, torment, anguish, misery, &c. on the other ; they are still but different degrees of the same thing, and belong to the ideas of pleasure and pain, delight or uneasiness ; which are the names I shall most commonly use for those two sorts of ideas.

§ 3. The infinitely wise author of our being having given us the power over several parts of our bodies, to move or keep them at rest as we think fit ; and also, by the motion of them, to move ourselves and other contiguous bodies, in which consist all the actions of our

body; having also given a power to our minds in several instances, to choose, amongst its ideas, which it will think on, and to pursue the inquiry of this or that subject with consideration and attention, to excite us to these actions of thinking and motion that we are capable of; has been pleased to join to several thoughts, and several sensations, a perception of delight. If this were wholly separated from all our outward sensations and inward thoughts, we should have no reason to prefer one thought or action to another; negligence to attention; or motion to rest. And so we should neither stir our bodies nor employ our minds, but let our thoughts (if I may so call it) run a-drift, without any direction or design; and suffer the ideas of our minds, like unregarded shadows, to make their appearances there, as it happened, without attending to them. In which state man, however furnished with the faculties of understanding and will, would be a very idle unactive creature, and pass his time only in a lazy, lethargic dream. It has therefore pleased our wise Creator to annex to several objects, and the ideas which we receive from them, as also to several of our thoughts, a concomitant pleasure, and that in several objects, to several degrees; that those faculties which he had endowed us with might not remain wholly idle and unemployed by us.

§ 4. Pain has the same efficacy and use to set us on work that pleasure has, we being as ready to employ our faculties to avoid that, as to pursue this: only this is worth our consideration, that pain is often produced by the same objects and ideas that produce pleasure in us. This their near conjunction, which makes us often feel pain in the sensations where we expected pleasure, gives us new occasion of admiring the wisdom and goodness of our Maker: who, designing the preservation of our being, has annexed pain to the application of many things to our bodies, to warn us of the harm that they will do, and as advices to withdraw from them. But he not designing our preservation barely, but the preservation of every part and organ in its perfection, hath, in many cases, annexed pain to those very ideas which

delight us. Thus heat, that is very agreeable to us in one degree, by a little greater increase of it, proves no ordinary torment ; and the most pleasant of all sensible objects, light itself, if there be too much of it, if increased beyond a due proportion to our eyes, causes a very painful sensation. Which is wisely and favourably so ordered by nature, that when any object does by the vehemency of its operation disorder the instruments of sensation, whose structures cannot but be very nice and delicate, we might by the pain be warned to withdraw before the organ be quite put out of order, and so be unfitted for its proper function for the future. The consideration of those objects that produce it may well persuade us, that this is the end or use of pain. For though great light be insufferable to our eyes, yet the highest degree of darkness does not at all disease them ; because that causing no disorderly motion in it, leaves that curious organ unarmed in its natural state. But yet excess of cold as well as heat pains us, because it is equally destructive to that temper which is necessary to the preservation of life, and the exercise of the several functions of the body, and which consists in a moderate degree of warmth ; or, if you please, a motion of the insensible parts of our bodies, confined within certain bounds.

§ 5. Beyond all this we may find another reason, why God hath scattered up and down several degrees of pleasure and pain, in all the things that environ and affect us, and blended them together in almost all that our thoughts and senses have to do with ; that we finding imperfection, dissatisfaction, and want of complete happiness, in all the enjoyments which the creatures can afford us, might be led to seek it in the enjoyment of him with whom there is fulness of joy, and at whose right hand are pleasures for evermore.

§ 6. Though what I have here said may ^{Pleasure} not perhaps make the ideas of pleasure and ^{and pain.} pain clearer to us than our own experience does, which is the only way that we are capable of having them ; yet the consideration of the reason why they are annexed to so many other ideas, serving to give

us due sentiments of the wisdom and goodness of the sovereign disposer of all things, may not be unsuitable to the main end of these inquiries; the knowledge and veneration of him being the chief end of all our thoughts, and the proper business of all understandings.

Existence and unity. § 7. Existence and unity are two other ideas that are suggested to the understanding by every object without, and every idea within. When ideas are in our minds, we consider them as being actually there, as well as we consider things to be actually without us; which is, that they exist, or have existence: and whatever we can consider as one thing, whether a real being or idea, suggests to the understanding the idea of unity.

Power. § 8. Power also is another of those simple ideas which we receive from sensation and reflection. For observing in ourselves, that we can at pleasure move several parts of our bodies which were at rest; the effects also, that natural bodies are able to produce in one another, occurring every moment to our senses; we both these ways get the idea of power.

Succession. § 9. Besides these there is another idea, which, though suggested by our senses, yet is more constantly offered to us by what passes in our minds; and that is the idea of succession. For if we look immediately into ourselves, and reflect on what is observable there, we shall find our ideas always, whilst we are awake, or have any thought, passing in train, one going and another coming, without intermission.

Simple ideas the materials of all our knowledge. § 10. These, if they are not all, are at least (as I think) the most considerable of those simple ideas which the mind has, and out of which is made all its other knowledge: all which it receives only by the two fore-mentioned ways of sensation and reflection.

Nor let any one think these too narrow bounds for the capacious mind of man to expatiate in, which takes its flight farther than the stars, and cannot be confined by the limits of the world; that extends its thoughts often even beyond the utmost expansion of

matter, and makes excursions into that incomprehensible inane. I grant all this, but desire any one to assign any simple idea which is not received from one of those inlets before-mentioned, or any complex idea not made out of those simple ones. Nor will it be so strange to think these few simple ideas sufficient to employ the quickest thought, or largest capacity; and to furnish the materials of all that various knowledge, and more various fancies and opinions of all mankind; if we consider how many words may be made out of the various composition of twenty-four letters; or if, going one step farther, we will but reflect on the variety of combinations may be made, with barely one of the above-mentioned ideas, viz. number, whose stock is inexhaustible and truly infinite; and what a large and immense field doth extension alone afford the mathematicians?

CHAP. VIII.

Some farther Considerations concerning our Simple Ideas.

§ 1. CONCERNING the simple ideas of Positive ideas from privative causes. sensation it is to be considered that whatsoever is so constituted in nature as to be able, by affecting our senses, to cause any perception in the mind, doth thereby produce in the understanding a simple idea; which, whatever be the external cause of it, when it comes to be taken notice of by our discerning faculty, it is by the mind looked on and considered there to be a real positive idea in the understanding as much as any other whatsoever; though perhaps the cause of it be but a privation of the subject.

§ 2. Thus the idea of heat and cold, light and darkness, white and black, motion and rest, are equally clear and positive ideas in the mind; though perhaps

some of the causes which produce them are barely privations in subjects, from whence our senses derive those ideas. These the understanding, in its view of them, considers all as distinct positive ideas, without taking notice of the causes that produce them : which is an inquiry not belonging to the idea, as it is in the understanding, but to the nature of the things existing without us. These are two very different things, and carefully to be distinguished ; it being one thing to perceive and know the idea of white or black, and quite another to examine what kind of particles they must be, and how ranged in the superficies, to make any object appear white or black.

§ 3. A painter or dyer, who never inquired into their causes, hath the ideas of white and black, and other colours, as clearly, perfectly, and distinctly in his understanding, and perhaps more distinctly, than the philosopher, who hath busied himself in considering their natures, and thinks he knows how far either of them is in its cause positive or privative ; and the idea of black is no less positive in his mind, than that of white, however the cause of that colour in the external object may be only a privation.

§ 4. If it were the design of my present undertaking to inquire into the natural causes and manner of perception, I should offer this as a reason why a privative cause might, in some cases at least, produce a positive idea, viz. that all sensation being produced in us only by different degrees and modes of motion in our animal spirits, variously agitated by external objects, the abatement of any former motion must as necessarily produce a new sensation, as the variation or increase of it ; and so introduce a new idea, which depends only on a different motion of the animal spirits in that organ.

§ 5. But whether this be so or no, I will not here determine, but appeal to every one's own experience, whether the shadow of a man, though it consists of nothing but the absence of light (and the more the absence of light is, the more discernible is the shadow) does not, when a man looks on it, cause as clear and

positive idea in his mind, as a man himself, though covered over with clear sun-shine? and the picture of a shadow is a positive thing. Indeed we have negative names, which stand not directly for positive ideas, but for their absence, such as insipid, silence, nihil, &c. which words denote positive ideas; v. g. taste, sound, being, with a signification of their absence.

§ 6. And thus one may truly be said to see darkness. For supposing a hole perfectly dark, from whence no light is reflected, it is certain one may see the figure of it, or it may be painted: or whether the ink I write with makes any other idea, is a question. The privative causes I have here assigned of positive ideas are according to the common opinion; but in truth it will be hard to determine, whether there be really any ideas from a privative cause, till it be determined, whether rest be any more a privation than motion.

Positive
ideas from
privative
causes.

§ 7. To discover the nature of our ideas the better, and to discourse of them intelligibly, it will be convenient to distinguish them as they are ideas or perceptions in our minds, and as they are modifications of matter in the bodies that cause such perceptions in us: that so we may not think (as perhaps usually is done) that they are exactly the images and resemblances of something inherent in the subject; most of those of sensation being in the mind no more the likeness of something existing without us, than the names that stand for them are the likeness of our ideas, which yet upon hearing they are apt to excite in us.

Ideas in the
mind, quali-
ties in bo-
dies.

§ 8. Whatsoever the mind perceives in itself, or is the immediate object of perception, thought, or understanding, that I call idea; and the power to produce any idea in our mind I call quality of the subject wherein that power is. Thus a snow-ball having the power to produce in us the ideas of white, cold, and round, the powers to produce those ideas in us, as they are in the snow-ball, I call qualities; and as they are sensations or perceptions in our understandings, I call them ideas: which ideas, if I speak of sometimes, as in the

things themselves, I would be understood to mean those qualities in the objects which produce them in us.

§ 9. Qualities thus considered in bodies are, first, such as are utterly inseparable from the body, in what estate soever it be ; such as in all the alterations and changes it suffers, all the force can be used upon it, it constantly keeps ; and such as sense constantly finds in every particle of matter which has bulk enough to be perceived, and the mind finds inseparable from every particle of matter, though less than to make itself singly be perceived by our senses, v. g. Take a grain of wheat, divide it into two parts, each part has still solidity, extension, figure, and mobility ; divide it again, and it retains still the same qualities ; and so divide it on till the parts become insensible, they must retain still each of them all those qualities. For division (which is all that a mill, or pestle, or any other body does upon another, in reducing it to insensible parts) can never take away either solidity, extension, figure, or mobility from any body, but only makes two or more distinct separate masses of matter, of that which was but one before : all which distinct masses, reckoned as so many distinct bodies, after division make a certain number. These I call original or primary qualities of body, which I think we may observe to produce simple ideas in us, viz. solidity, extension, figure, motion or rest, and number.

§ 10. Secondly, such qualities which in truth are nothing in the objects themselves, but powers to produce various sensations in us by their primary qualities, i. e. by the bulk, figure, texture, and motion of their insensible parts, as colours, sounds, tastes, &c. these I call secondary qualities. To these might be added a third sort, which are allowed to be barely powers, though they are as much real qualities in the subject, as those which I, to comply with the common way of speaking, call qualities, but for distinction, secondary qualities. For the power in fire to produce a new colour, or consistency, in wax or clay, by its primary qualities, is as much a quality in fire, as the power it has to produce in me a new idea

or sensation of warmth or burning, which I felt not before by the same primary qualities, viz. the bulk, texture, and motion of its insensible parts.

§ 11. The next thing to be considered is, how bodies produce ideas in us; and that is manifestly by impulse, the only way which we can conceive bodies to operate in. How primary qualities produce their ideas.

§ 12. If then external objects be not united to our minds, when they produce ideas therein, and yet we perceive these original qualities in such of them as singly fall under our senses, it is evident that some motion must be thence continued by our nerves or animal spirits, by some parts of our bodies, to the brain, or the seat of sensation, there to produce in our minds the particular ideas we have of them. And since the extension, figure, number and motion of bodies, of an observable bigness, may be perceived at a distance by the sight, it is evident some singly imperceptible bodies must come from them to the eyes, and thereby convey to the brain some motion, which produces these ideas which we have of them in us.

§ 13 After the same manner that the ideas of these original qualities are produced in us, we may conceive that the ideas of secondary qualities are also produced, viz. by the operations of insensible particles on our senses. For it being manifest that there are bodies and good store of bodies, each whereof are so small, that we cannot, by any of our senses, discover either their bulk, figure, or motion as is evident in the particles of the air and water, and others extremely smaller than those, perhaps as much smaller than the particles of air and water, as the particles of air and water are smaller than pease or hail-stones: let us suppose at present, that the different motions and figures, bulk and number of such particles, affecting the several organs of our senses, produce in us those different sensations, which we have from the colours and smells of bodies; v. g. that a violet, by the impulse of such insensible particles of matter of peculiar figures and bulks, and in different degrees and modifications of their motions, causes the

ideas of the blue colour and sweet scent of that flower, to be produced in our minds; it being no more impossible to conceive that God should annex such ideas to such motions, with which they have no similitude, than that he should annex the idea of pain to the motion of a piece of steel dividing our flesh, with which that idea hath no resemblance.

§ 14. What I have said concerning colours and smells may be understood also of tastes and sounds, and other the like sensible qualities; which, whatever reality we by mistake attribute to them, are in truth nothing in the objects themselves, but powers to produce various sensations in us, and depend on those primary qualities, viz. bulk, figure, texture, and motion of parts; as I have said.

§ 15. From whence I think it easy to draw this observation, that the ideas of primary qualities of bodies are resemblances of them, and their patterns do really exist in the bodies themselves; but the ideas, produced in us by these secondary qualities, have no resemblance of them at all. There is nothing like our ideas existing in the bodies themselves. They are in the bodies, we denominate from them, only a power to produce those sensations in us: and what is sweet, blue or warm in idea, is but the certain bulk, figure, and motion of the insensible parts in the bodies themselves, which we call so.

§ 16. Flame is denominated hot and light; snow, white and cold; and manna, white and sweet, from the ideas they produce in us: which qualities are commonly thought to be the same in those bodies that those ideas are in us, the one the perfect resemblance of the other, as they are in a mirror; and it would by most men be judged very extravagant, if one should say otherwise. And yet he that will consider that the same fire, that at one distance produces in us the sensation of warmth, does at a nearer approach produce in us the far different sensation of pain, ought to bethink himself what reason he has to say, that his idea of warmth, which was produced in him by the fire, is actually in

the fire ; and his idea of pain, which the same fire produced in him the same way, is not in the fire. Why are whiteness and coldness in snow, and pain not, when it produces the one and the other idea in us ; and can do neither, but by the bulk, figure, number, and motion of its solid parts ?

§ 17. The particular bulk, number, figure, and motion of the parts of fire, or snow, are really in them, whether any one's senses perceive them or no ; and therefore they may be called real qualities, because they really exist in those bodies : but light, heat, whiteness or coldness, are no more really in them, than sickness or pain is in manna. Take away the sensation of them ; let not the eyes see light, or colours, nor the ears hear sounds ; let the palate not taste, nor the nose smell ; and all colours, tastes, odours, and sounds, as they are such particular ideas, vanish and cease, and are reduced to their causes, i. e. bulk, figure, and motion of parts.

§ 18. A piece of manna of a sensible bulk is able to produce in us the idea of a round or square figure, and, by being removed from one place to another, the idea of motion. This idea of motion represents it as it really is in the manna moving : a circle or square are the same, whether in idea or existence, in the mind, or in the manna ; and this both motion and figure are really in the manna, whether we take notice of them or no : this every body is ready to agree to. Besides, manna by the bulk, figure, texture, and motion of its parts, has a power to produce the sensations of sickness, and sometimes of acute pains or gripings in us. That these ideas of sickness and pain are not in the manna, but effects of its operations on us, and are nowhere when we feel them not ; this also every one readily agrees to. And yet men are hardly to be brought to think, that sweetness and whiteness are not really in manna ; which are but the effects of the operations of manna by the motion, size, and figure of its particles on the eyes and palate ; as the pain and sickness caused by manna are confessedly nothing but the effects of its operations on the stomach and guts, by the size,

motion and figure of its insensible parts (for by nothing else can a body operate as has been proved :) as if it could not operate on the eyes and palate, and thereby produce in the mind particular distinct ideas, which in itself it has not, as well as we allow it can operate on the guts and stomach, and thereby produce distinct ideas, which in itself it has not. These ideas being all effects of the operations of manna, on several parts of our bodies, by the size, figure, number, and motion of its parts; why those produced by the eyes and palate should rather be thought to be really in the manna, than those produced by the stomach and guts; or why the pain and sickness, ideas that are the effect of manna, should be thought to be no-where when they are not felt; and yet the sweetness and whiteness, effects of the same manna on other parts of the body, by ways equally as unknown, should be thought to exist in the manna, when they are not seen or tasted, would need some reason to explain.

§ 19. Let us consider the red and white colours in porphyry: hinder light from striking on it, and its colours vanish, it no longer produces any such ideas in us; upon the return of light, it produces these appearances on us again. Can any one think any real alterations are made in the porphyry, by the presence or absence of light; and that those ideas of whiteness and redness are really in porphyry in the light, when it is plain it has no colour in the dark? it has, indeed, such a configuration of particles, both night and day, as are apt, by the rays of light rebounding from some parts of that hard stone, to produce in us the idea of redness, and from others the idea of whiteness; but whiteness or redness are not in it at any time, but such a texture, that hath the power to produce such a sensation in us.

§ 20. Pound an almond, and the clear white colour will be altered into a dirty one, and the sweet taste into an oily one. What real alteration can the beating of the pestle make in any body, but an alteration of the texture of it?

§ 21. Ideas being thus distinguished and understood, we may be able to give an account how the same water, at the same time, may produce the idea of cold by one hand and of heat by the other; whereas it is impossible that the same water, if those ideas were really in it, should at the same time be both hot and cold: for if we imagine warmth, as it is in our hands, to be nothing but a certain sort and degree of motion in the minute particles of our nerves, or animal spirits, we may understand how it is possible that the same water may, at the same time, produce the sensations of heat in one hand, and cold in the other; which yet figure never does, that never producing the idea of a square by one hand, which has produced the idea of a globe by another. But if the sensation of heat and cold be nothing but the increase or diminution of the motion of the minute parts of our bodies, caused by the corpuscles of any other body, it is easy to be understood, that if that motion be greater in one hand than in the other; if a body be applied to the two hands, which has in its minute particles a greater motion, than in those of one of the hands, and a less than in those of the other; it will increase the motion of the one hand, and lessen it in the other, and so cause the different sensations of heat and cold that depend thereon.

§ 22. I have in what just goes before been engaged in physical inquiries a little farther than perhaps I intended. But it being necessary to make the nature of sensation a little understood, and to make the difference between the qualities in bodies, and the ideas produced by them in the mind, to be distinctly conceived, without which it were impossible to discourse intelligibly of them; I hope I shall be pardoned this little excursion into natural philosophy, it being necessary in our present inquiry to distinguish the primary and real qualities of bodies, which are always in them (viz. solidity, extension, figure, number, and motion, or rest; and are sometimes perceived by us, viz. when the bodies they are in are big enough singly to be discerned) from those secondary and imputed qualities, which are but the

powers of several combinations of those primary ones, when they operate, without being distinctly discerned; whereby we may also come to know what ideas are, and what are not, resemblances of something really existing in the bodies we denominate from them.

Three sorts of qualities in bodies. § 23. The qualities then that are in bodies rightly considered, are of three sorts.

First, the bulk, figure, number, situation, and motion, or rest of their solid parts; those are in them, whether we perceive them or no; and when they are of that size, that we can discover them, we have by these an idea of the thing, as it is in itself, as is plain in artificial things. These I call primary qualities.

Secondly, the power that is in any body, by reason of its insensible primary qualities, to operate after a peculiar manner on any of our senses, and thereby produce in us the different ideas of several colours, sounds, smells, tastes, &c. These are usually called sensible qualities.

Thirdly, the power that is in any body, by reason of the particular constitution of its primary qualities, to make such a change in the bulk, figure, texture, and motion of another body, as to make it operate on our senses, differently from what it did before. Thus the sun has a power to make wax white, and fire to make lead fluid. These are usually called powers.

The first of these, as has been said, I think, may be properly called real, original, or primary qualities, because they are in the things themselves, whether they are perceived or no; and upon their different modifications it is, that the secondary qualities depend.

The other two are only powers to act differently upon other things, which powers result from the different modifications of those primary qualities.

§ 24. But though the two latter sorts of qualities are powers barely, and nothing but powers, relating to several other bodies, and resulting from the different modifications of the original qualities; yet they are generally otherwise thought of. For

The first are
resemblances.
The second
thought re-
semblances,
but are not.
The third

the second sort, viz. the powers to produce several ideas in us by our senses, are looked upon as real qualities, in the things thus affecting us: but the third sort are called and esteemed barely powers, v. g. the idea of heat, or light, which we receive by our eyes or touch from the sun, are commonly thought real qualities, existing in the sun, and something more than mere powers in it. But when we consider the sun, in reference to wax, which it melts or blanches, we look on the whiteness and softness produced in the wax, not as qualities in the sun, but effects produced by powers in it: whereas, if rightly considered, these qualities of light and warmth, which are perceptions in me when I am warmed, or enlightened by the sun, are no otherwise in the sun, than the changes made in the wax, when it is blanched or melted, are in the sun. They are all of them equally powers in the sun, depending on its primary qualities; whereby it is able, in the one case, so to alter the bulk, figure, texture, or motion of some of the insensible parts of my eyes or hands, as thereby to produce in me the idea of light or heat; and in the other it is able so to alter the bulk, figure, texture, or motion of the insensible parts of the wax, as to make them fit to produce in me the distinct ideas of white and fluid.

§ 25. The reason why the one are ordinarily taken for real qualities, and the other only for bare powers, seems to be, because the ideas we have of distinct colours, sounds, &c. containing nothing at all in them of bulk, figure, or motion, we are not apt to think them the effects of these primary qualities, which appear not, to our senses, to operate in their production; and with which they have not any apparent congruity, or conceivable connexion. Hence it is that we are so forward to imagine, that those ideas are the resemblances of something really existing in the objects themselves; since sensation discovers nothing of bulk, figure, or motion of parts in their production; nor can reason show how bodies, by their bulk, figure, and mo-

neither are,
nor are
thought so.

tion, should produce in the mind the ideas of blue or yellow, &c. But in the other case, in the operations of bodies, changing the qualities one of another, we plainly discover, that the quality produced hath commonly no resemblance with any thing in the thing producing it; wherefore we look on it as a bare effect of power. For though receiving the idea of heat, or light, from the sun, we are apt to think it is a perception and resemblance of such a quality in the sun; yet when we see wax, or a fair face, receive change of colour from the sun, we cannot imagine that to be the reception or resemblance of any thing in the sun, because we find not those different colours in the sun itself. For our senses being able to observe a likeness or unlikeness of sensible qualities in two different external objects, we forwardly enough conclude the production of any sensible quality in any subject to be an effect of bare power, and not the communication of any quality, which was really in the efficient, when we find no such sensible quality in the thing that produced it. But our senses not being able to discover any unlikeness between the idea produced in us, and the quality of the object producing it; we are apt to imagine, that our ideas are resemblances of something, in the objects, and not the effects of certain powers placed in the modification of their primary qualities; with which primary qualities the ideas produced in us have no resemblance.

Secondary
qualities
twofold;
first, immediately per-
ceivable; se-
condly, me-
diately per-
ceivable.

§ 26. To conclude, beside those before mentioned primary qualities in bodies, viz. bulk, figure, extension, number, and motion of their solid parts; all the rest whereby we take notice of bodies, and distinguish them one from another, are nothing else but several powers in them depending on those primary qualities; whereby they are fitted, either by immediately operating on our bodies, to produce several different ideas in us; or else by operating on other bodies, so to change their primary qualities, as to render them capable of producing ideas in us, dif-

ferent from what before they did. The former of these, I think, may be called secondary qualities, immediately perceivable: the latter, secondary qualities mediately perceivable.

CHAP. IX.

Of Perception.

§ 1. PERCEPTION, as it is the first faculty of the mind, exercised about our ideas; so it is the first and simplest idea we have from reflection, and is by some called thinking in general. Though thinking, in the propriety of the English tongue, signifies that sort of operation in the mind about its ideas, wherein the mind is active; where it, with some degree of voluntary attention, considers any thing. For in bare naked perception, the mind is, for the most part, only passive: and what it perceives, it cannot avoid perceiving.

§ 2. What perception is, every one will know better by reflecting on what he does himself, what he sees, hears, feels, &c. or thinks, than by any discourse of mine. Is only when the mind receives the impression. Whoever reflects on what passes in his own mind, can not miss it: and if he does not reflect, all the words in the world cannot make him have any notion of it.

§ 3. This is certain, that whatever alterations are made in the body, if they reach not the mind; whatever impressions are made on the outward parts, if they are not taken notice of within; there is no perception. Fire may burn our bodies, with no other effect, than it does a billet, unless the motion be continued to the brain, and there the sense of heat, or idea of pain, be produced in the mind, wherein consists actual perception.

§ 4. How often may a man observe in himself, that whilst his mind is intently employed in the contemplation of some objects, and curiously surveying some ideas that are there, it takes no notice of impressions of sounding bodies made upon the organ of hearing, with the same alteration that uses to be for the producing the idea of sound? A sufficient impulse there may be on the organ; but if not reaching the observation of the mind, there follows no perception: and though the motion that uses to produce the idea of sound be made in the ear, yet no sound is heard. Want of sensation, in this case, is not through any defect in the organ, or that the man's ears are less affected than at other times when he does hear; but that which uses to produce the idea, though conveyed in by the usual organ, not being taken notice of in the understanding, and so imprinting no idea in the mind, there follows no sensation. So that wherever there is sense, or perception, there some idea is actually produced, and present in the understanding.

Children, though they have ideas in the womb, have none innate.

§ 5. Therefore I doubt not but children, by the exercise of their senses about objects that affect them in the womb, receive some few ideas before they are born; as the unavoidable effects, either of the bodies that environ them, or else of those wants or diseases they suffer: amongst which (if one may conjecture concerning things not very capable of examination) I think the ideas of hunger and warmth are two; which probably are some of the first that children have, and which they scarce ever part with again.

§ 6. But though it be reasonable to imagine that children receive some ideas before they come into the world, yet those simple ideas are far from those innate principles which some contend for, and we above have rejected. These here mentioned being the effects of sensation, are only from some affections of the body, which happen to them there, and so depend on something exterior to the mind: no otherwise differing in their manner of production from other ideas derived from sense, but only in the precedency of time; whereas

those innate principles are supposed to be quite of another nature ; not coming into the mind by any accidental alterations in, or operations on the body ; but, as it were, original characters impressed upon it, in the very first moment of its being and constitution.

§ 7. As there are some ideas which we may reasonably suppose may be introduced into the minds of children in the womb, subservient to the necessities of their life and being there ; so after they are born, those ideas are the earliest imprinted, which happen to be the sensible qualities which first occur to them : amongst which, light is not the least considerable, nor of the weakest efficacy. And how covetous the mind is to be furnished with all such ideas as have no pain accompanying them, may be a little guessed, by what is observable in children new-born, who always turn their eyes to that part from whence the light comes, lay them how you please. But the ideas that are most familiar at first being various, according to the divers circumstances of children's first entertainment in the world ; the order wherein the several ideas come at first into the mind is very various and uncertain also ; neither is it much material to know it.

Which ideas first, is not evident.

§ 8. We are further to consider concerning perception, that the ideas we receive by sensation are often in grown people altered by the judgment, without our taking notice of it. When we set before our eyes a round globe, of any uniform colour, v. g. gold, alabaster, or jet ; it is certain that the idea thereby imprinted in our mind, is of a flat circle variously shadowed, with several degrees of light and brightness coming to our eyes. But we having by use been accustomed to perceive what kind of appearance convex bodies are wont to make in us, what alterations are made in the reflections of light by the difference of the sensible figures of bodies ; the judgment presently, by an habitual custom, alters the appearances into their causes ; so that from that which is truly variety of shadow or colour, collecting the figure, it makes it pass

Ideas of sensation often changed by the judgment.

for a mark of figure, and frames to itself the perception of a convex figure and an uniform colour; when the idea we receive from thence is only a plane variously coloured, as is evident in painting. To which purpose I shall here insert a problem of that very ingenious and studious promoter of real knowledge, the learned and worthy Mr. Molineaux, which he was pleased to send me in a letter some months since; and it is this: Suppose a man born blind, and now adult, and taught by his touch to distinguish between a cube and a sphere of the same metal, and nighly of the same bigness, so as to tell, when he felt one and the other, which is the cube, which the sphere. Suppose then the cube and sphere placed on a table, and the blind man be made to see: quære, “whether by his sight, before he touched them, he could now distinguish and tell, which is “the globe, which the cube?” to which the acute and judicious proposer answers: Not. For though he has obtained the experience of how a globe, how a cube affects his touch; yet he has not yet obtained the experience, that what affects his touch so or so, must affect his sight so or so: or that a protuberant angle in the cube, that pressed his hand unequally, shall appear to his eye as it does in the cube. I agree with this thinking gentleman, whom I am proud to call my friend, in his answer to this his problem; and am of opinion, that the blind man at first sight, would not be able with certainty to say which was the globe, which the cube, whilst he only saw them: though he could unerringly name them by his touch, and certainly distinguish them by the difference of their figures felt. This I have set down, and leave with my reader, as an occasion for him to consider how much he may be beholden to experience, improvement, and acquired notions, where he thinks he had not the least use of, or help from them: and the rather, because this observing gentleman further adds, that having upon the occasion of my book, proposed this to divers very ingenious men, he hardly ever met with one, that at first gave the answer to it which he thinks true, till by hearing his reasons they were convinced.

§ 9. But this is not, I think, usual in any of our ideas, but those received by sight: because sight, the most comprehensive of all our senses, conveying to our minds the ideas of light and colours, which are peculiar only to that sense; and also the far different ideas of space, figure, and motion, the several varieties whereof change the appearances of its proper object, viz. light and colours; we bring ourselves by use to judge of the one by the other. This, in many cases, by a settled habit, in things whereof we have frequent experience, is performed so constantly and so quick, that we take that for the perception of our sensation, which is an idea formed by our judgment; so that one, viz. that of sensation, serves only to excite the other, and is scarce taken notice of itself: as a man who reads or hears with attention and understanding, takes little notice of the characters, or sounds, but of the ideas that are excited in him by them.

§ 10. Nor need we wonder that this is done with so little notice, if we consider how very quick the actions of the mind are performed: for as itself is thought to take up no space, to have no extension; so its actions seem to require no time, but many of them seem to be crowded into an instant. I speak this in comparison to the actions of the body. Any one may easily observe this in his own thoughts, who will take the pains to reflect on them. How, as it were in an instant, do our minds with one glance see all the parts of a demonstration, which may very well be called a long one, if we consider the time it will require to put it into words, and step by step show it another? Secondly, we shall not be so much surprized, that this is done in us with so little notice, if we consider how the facility which we get of doing things, by a custom of doing, makes them often pass in us without our notice. Habits, especially such as are begun very early, come at last to produce actions in us, which often escape our observation. How frequently do we, in a day, cover our eyes with our eye-lids, without perceiving that we are at all in the dark? Men that by custom have got the use of a by-word, do almost in every sentence pronounce

sounds which, though taken notice of by others, they themselves neither hear nor observe. And therefore it is not so strange, that our mind should often change the idea of its sensation into that of its judgment, and make one serve only to excite the other without our taking notice of it.

Perception
puts the dif-
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inferior be-
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§ 11. This faculty of perception seems to me to be that, which puts the distinction betwixt the animal kingdom and the inferior parts of nature. For however vegetables have, many of them, some degrees of motion, and upon the different application of other bodies to them, do very briskly alter their figures and motions, and so have obtained the name of sensitive plants, from a motion which has some resemblance to that which in animals follows upon sensation: yet, I suppose, it is all bare mechanism; and no otherwise produced, than the turning of a wild oat-beard, by the insinuation of the particles of moisture; or the shortening of a rope, by the effusion of water. All which is done without any sensation in the subject, or the having or receiving any ideas.

§ 12. Perception, I believe, is in some degree in all sorts of animals; though in some, possibly, the avenues provided by nature for the reception of sensations are so few, and the perception they are received with so obscure and dull, that it comes extremely short of the quickness and variety of sensation which are in other animals; but yet it is sufficient for, and wisely adapted to, the state and condition of that sort of animals who are thus made. So that the wisdom and goodness of the Maker plainly appear in all the parts of this stupendous fabric, and all the several degrees and ranks of creatures in it.

§ 13. We may, I think, from the make of an oyster, or cockle, reasonably conclude that it has not so many, nor so quick senses, as a man, or several other animals; nor if it had, would it, in that state and incapacity of transferring itself from one place to another, be bettered by them. What good would sight and hearing do to a creature, that cannot move itself to, or from the

objects wherein at a distance it perceives good or evil? And would not quickness of sensation be an inconvenience to an animal that must lie still, where chance has once placed it; and there receive the afflux of colder or warmer, clean or foul water, as it happens to come to it?

§ 14. But yet I cannot but think there is some small dull perception, whereby they are distinguished from perfect insensibility. And that this may be so, we have plain instances even in mankind itself. Take one, in whom decrepid old age has blotted out the memory of his past knowledge, and clearly wiped out the ideas his mind was formerly stored with; and has, by destroying his sight, hearing, and smell quite, and his taste to a great degree, stopped up almost all the passages for new ones to enter; or, if there be some of the inlets yet half open, the impressions made are scarce perceived, or not at all retained. How far such an one (notwithstanding all that is boasted of innate principles) is in his knowledge, and intellectual faculties, above the condition of a cockle or an oyster, I leave to be considered. And if a man had passed sixty years in such a state, as it is possible he might, as well as three days; I wonder what difference there would have been, in any intellectual perfections, between him and the lowest degree of animals.

§ 15. Perception then being the first step Perception and degree towards knowledge, and the in- the inlet of let of all the materials of it; the fewer senses knowledge. any man, as well as any other creature, hath, and the fewer and duller the impressions are that are made by them, and the duller the faculties are that are employed about them; the more remote are they from that knowledge, which is to be found in some men. But this being in great variety of degrees (as may be perceived amongst men) cannot certainly be discovered in the several species of animals, much less in their particular individuals. It suffices me only to have remarked here, that perception is the first operation of all our intellectual faculties, and the inlet of all knowledge in our minds. And I am apt too to imagine, that it is

perception in the lowest degree of it, which puts the boundaries between animals and the inferior ranks of creatures. But this I mention only as my conjecture by the by; it being indifferent to the matter in hand, which way the learned shall determine of it.

CHAP. X.

Of Retention.

Contempla-
tion.

§ 1. THE next faculty of the mind, whereby it makes a farther progress towards knowledge, is that which I call retention, or the keeping of those simple ideas, which from sensation or reflection it hath received. This is done two ways; first, by keeping the idea, which is brought into it, for some time actually in view; which is called contemplation.

Memory.

§ 2. The other way of retention, is the power to revive again in our minds those ideas, which after imprinting have disappeared, or have been as it were laid aside out of sight; and thus we do, when we conceive heat or light, yellow or sweet, the object being removed. This is memory, which is as it were the store-house of our ideas. For the narrow mind of man not being capable of having many ideas under view and consideration at once, it was necessary to have a repository to lay up those ideas, which at another time it might have use of. But our ideas being nothing but actual perceptions in the mind, which cease to be any thing, when there is no perception of them, this laying up of our ideas in the repository of the memory, signifies no more but this, that the mind has a power in many cases to revive perceptions, which it has once had, with this additional perception annexed to them, that it has had them before. And in this sense it is, that our ideas are said to be in our memories, when indeed they are actually no-where, but only there is an

ability in the mind when it will to revive them again, and as it were paint them a-new on itself, though some with more, some with less difficulty ; some more lively, and others more obscurely. And thus it is by the assistance of this faculty, that we are to have all those ideas in our understandings, which though we do not actually contemplate, yet we can bring in sight, and make appear again, and be the objects of our thoughts, without the help of those sensible qualities which first imprinted them there.

§ 3. Attention and repetition help much to the fixing any ideas in the memory ; but those which naturally at first make the deepest and most lasting impression, are those which are accompanied with pleasure or pain. Attention, repetition, pleasure, and pain, six ideas. The great business of the senses being to make us take notice of what hurts or advantages the body, it is wisely ordered by nature (as has been shown) that pain should accompany the reception of several ideas ; which supplying the place of consideration and reasoning in children, and acting quicker than consideration in grown men, makes both the old and young avoid painful objects, with that haste which is necessary for their preservation ; and, in both, settles in the memory a caution for the future.

§ 4. Concerning the several degrees of Ideas fade in lasting, wherewith ideas are imprinted on the memory. the memory, we may observe, that some of them have been produced in the understanding by an object affecting the senses once only, and no more than once ; others, that have more than once offered themselves to the senses, have yet been little taken notice of : the mind either heedless, as in children, or otherwise employed, as in men, intent only on one thing, not setting the stamp deep into itself. And in some, where they are set on with care and repeated impressions, either through the temper of the body, or some other fault, the memory is very weak. In all these cases, ideas in the mind quickly fade, and often vanish quite out of the understanding, leaving no more footsteps or remaining

characters of themselves, than shadows do flying over fields of corn; and the mind is as void of them, as if they had never been there.

§ 5. Thus many of those ideas, which were produced in the minds of children, in the beginning of their sensation (some of which perhaps, as of some pleasures and pains, were before they were born, and others in their infancy) if in the future course of their lives they are not repeated again, are quite lost, without the least glimpse remaining of them. This may be observed in those who by some mischance have lost their sight when they were very young, in whom the ideas of colours having been but slightly taken notice of, and ceasing to be repeated, do quite wear out: so that some years after there is no more notion nor memory of colours left in their minds, than in those of people born blind. The memory of some it is true, is very tenacious, even to a miracle: but yet there seems to be a constant decay of all our ideas, even of those which are struck deepest, and in minds the most retentive; so that if they be not sometimes renewed by repeated exercise of the senses, or reflection on those kind of objects which at first occasioned them, the print wears out, and at last there remains nothing to be seen. Thus the ideas, as well as children, of our youth, often die before us: and our minds represent to us those tombs, to which we are approaching; where though the brass and marble remain, yet the inscriptions are effaced by time, and the imagery moulders away. The pictures drawn in our minds are laid in fading colours, and, if not sometimes refreshed, vanish and disappear. How much the constitution of our bodies and the make of our animal spirits are concerned in this, and whether the temper of the brain makes this difference, that in some it retains the characters drawn on it like marble, in others like free-stone, and in others little better than sand; I shall not here inquire: though it may seem probable, that the constitution of the body does sometimes influence the memory; since we oftentimes find a disease quite strip the mind of all its ideas, and the flames of a fever in a few days cal-

cine all those images to dust and confusion, which seemed to be as lasting as if graved in marble.

§ 6. But concerning the ideas themselves it is easy to remark, that those that are ^{Constantly repeated ideas can scarce be lost.} ofteneft refreshed (amongst which are those that are conveyed into the mind by more ways than one) by a frequent return of the objects or actions that produce them, fix themselves best in the memory, and remain clearest and longest there: and therefore those which are of the original qualities of bodies, viz. solidity, extension, figure, motion, and rest; and those that almost constantly affect our bodies, as heat and cold; and those which are the affections of all kinds of beings, as existence, duration and number, which almost every object that affects our senses, every thought which employs our minds, bring along with them: these, I say, and the like ideas, are seldom quite lost, whilst the mind retains any ideas at all.

§ 7. In this secondary perception, as I ^{In remembering, the mind is often active.} may so call it, or viewing again the ideas that are lodged in the memory, the mind is oftentimes more than barely passive; the appearance of those dormant pictures depending sometimes on the will. The mind very often sets itself on work in search of some hidden idea, and turns as it were the eye of the soul upon it; though sometimes too they start up in our minds of their own accord, and offer themselves to the understanding; and very often are roused and tumbled out of their dark cells into open day-light, by turbulent and tempestuous passions: our affections bringing ideas to our memory, which had otherwise lain quiet and unregarded. This farther is to be observed, concerning ideas lodged in the memory, and upon occasion revived by the mind, that they are not only (as the word revive imports) none of them new ones; but also that the mind takes notice of them, as of a former impression, and renews its acquaintance with them, as with ideas it had known before. So that though ideas formerly imprinted are not all constantly in view, yet in remembrance they are constantly known

to be such as have been formerly imprinted; i. e. in view, and taken notice of before by the understanding.

Two defects in the memory, oblivion and slowness. § 8. Memory, in an intellectual creature, is necessary in the next degree to perception. It is of so great moment, that where it is wanting, all the rest of our faculties are in a great measure useless: and we in our thoughts, reasonings, and knowledge, could not proceed beyond present objects, were it not for the assistance of our memories, wherein there may be two defects.

First, That it loses the idea quite, and so far it produces perfect ignorance. For since we can know nothing farther than we have the idea of it, when that is gone, we are in perfect ignorance.

Secondly, That it moves slowly, and retrieves not the ideas that it has, and are laid up in store, quick enough to serve the mind upon occasion. This, if it be to a great degree, is stupidity; and he, who, through this default in his memory, has not the ideas that are really preserved there, ready at hand when need and occasion calls for them, were almost as good be without them quite, since they serve him to little purpose. The dull man who loses the opportunity whilst he is seeking in his mind for those ideas that should serve his turn, is not much more happy in his knowledge than one that is perfectly ignorant. It is the business therefore of the memory to furnish the mind with those dormant ideas which it has present occasion for; in the having them ready at hand on all occasions, consists that which we call invention, fancy, and quickness of parts.

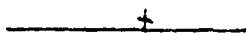
§ 9. These are defects, we may observe, in the memory of one man compared with another. There is another defect which we may conceive to be in the memory of man in general, compared with some superior created intellectual beings, which in this faculty may so far excel man, that they may have constantly in view the whole scene of all their former actions, wherein no one of the thoughts they have ever had may slip out of

their sight. The omniscience of God, who knows all things, past, present, and to come, and to whom the thoughts of men's hearts always lie open, may satisfy us of the possibility of this. For who can doubt but God may communicate to those glorious spirits, his immediate attendants, any of his perfections, in what proportions he pleases, as far as created finite beings can be capable? It is reported of that prodigy of parts, monsieur Pascal, that till the decay of his health had impaired his memory, he forgot nothing of what he had done, read, or thought, in any part of his rational age. This is a privilege so little known to most men, that it seems almost incredible to those, who, after the ordinary way, measure all others by themselves; but yet, when considered, may help us to enlarge our thoughts towards greater perfection of it in superior ranks of spirits. For this of Mr. Pascal was still with the narrowness that human minds are confined to here of having great variety of ideas only by succession, not all at once: whereas the several degrees of angels may probably have larger views, and some of them be endowed with capacities able to retain together, and constantly set before them, as in one picture, all their past knowledge at once. This, we may conceive, would be no small advantage to the knowledge of a thinking man, if all his past thoughts and reasonings could be always present to him. And therefore we may suppose it one of those ways, wherein the knowledge of separate spirits may exceedingly surpass ours.

§ 10. This faculty of laying up and retaining the ideas that are brought into the mind, several other animals seem to have to a great degree, as well as man. For to pass by other instances, birds learning of tunes, and the endeavours one may observe in them to hit the notes right, put it past doubt with me, that they have perception and retain ideas in their memories, and use them for patterns. For it seems to me impossible, that they should endeavour to conform their voices to notes (as it is plain they do) of which they had no ideas. For though I should

Brutes have
memory.

grant sound may mechanically cause a certain motion of the animal spirits, in the brains of those birds, whilst the tune is actually playing; and that motion may be continued on to the muscles of the wings, and so the bird mechanically be driven away by certain noises, because this may tend to the bird's preservation: yet that can never be supposed a reason, why it should cause mechanically, either whilst the tune is playing, much less after it has ceased, such a motion of the organs in the bird's voice as should conform it to the notes of a foreign sound; which imitation can be of no use to the bird's preservation. But which is more, it cannot with any appearance of reason be supposed (much less proved) that birds, without sense and memory, can approach their notes nearer and nearer by degrees to a tune played yesterday; which if they have no idea of in their memory, is no-where, nor can be a pattern for them to imitate, or which any repeated essays can bring them nearer to. Since there is no reason why the sound of a pipe should leave traces in their brains, which not at first, but by their after-endeavours, should produce the like sounds; and why the sounds they make themselves, should not make traces which they should follow, as well as those of the pipe, is impossible to conceive.



CHAP. XI.

Of Discerning, and other Operations of the Mind.

No know- § 1. ANOTHER faculty we may take no-
ledge with- tice of in our minds, is that of discerning
out discern- and distinguishing between the several
ment. ideas it has. It is not enough to have
a confused perception of something in general: un-
less the mind had a distinct perception of different

objects and their qualities, it would be capable of very little knowledge ; though the bodies that affect us were as busy about us as they are now, and the mind were continually employed in thinking. On this faculty of distinguishing one thing from another, depends the evidence and certainty of several, even very general propositions, which have passed for innate truths ; because men, overlooking the true cause why those propositions find universal assent, impute it wholly to native uniform impressions : whereas it in truth depends upon this clear discerning faculty of the mind, whereby it perceives two ideas to be the same, or different. But of this more hereafter.

§ 2. How much the imperfection of accurately discriminating ideas one from another lies either in the dulness or faults of the organs of sense ; or want of acuteness, exercise, or attention, in the understanding ; or hastiness and precipitancy, natural to some tempers, I will not here examine ; it suffices to take notice, that this is one of the operations, that the mind may reflect on and observe in itself. It is of that consequence to its other knowledge, that so far as this faculty is in itself dull, or not rightly made use of, for the distinguishing one thing from another ; so far our notions are confused, and our reason and judgment disturbed or misled. If in having our ideas in the memory ready at hand consists quickness of parts ; in this of having them unconfused, and being able nicely to distinguish one thing from another, where there is but the least difference, consists, in a great measure, the exactness of judgment, and clearness of reason, which is to be observed in one man above another. And hence perhaps may be given some reason of that common observation, that men, who have a great deal of wit, and prompt memories, have not always the clearest judgment, or deepest reason : for wit lying most in the assemblage of ideas, and putting those together with quickness and variety, wherein can be found any resemblance or congruity, thereby to make up pleasant pictures, and agree-

The difference of wit and judgment.

able visions in the fancy; judgment, on the contrary, lies quite on the other side, in separating carefully, one from another, ideas, wherein can be found the least difference; thereby to avoid being misled by similitude, and by affinity to take one thing for another. This is a way of proceeding quite contrary to metaphor and allusion, wherein for the most part lies that entertainment and pleasantry of wit, which strikes so lively on the fancy, and therefore is so acceptable to all people; because its beauty appears at first sight, and there is required no labour of thought to examine what truth or reason there is in it. The mind, without looking any farther, rests satisfied with the agreeableness of the picture, and the gaiety of the fancy; and it is a kind of an affront to go about to examine it by the severe rules of truth and good reason; whereby it appears, that it consists in something that is not perfectly conformable to them.

Clearness alone hinders confusion.

§ 3. To the well distinguishing our ideas, it chiefly contributes, that they be clear and determinate: and where they are so, it will not breed any confusion or mistake about them, though the senses should (as sometimes they do) convey them from the same object differently, on different occasions, and so seem to err. For though a man in a fever should from sugar have a bitter taste, which at another time would produce a sweet one; yet the idea of bitter in that man's mind, would be as clear and distinct from the idea of sweet, as if he had tasted only gall. Nor does it make any more confusion between the two ideas of sweet and bitter, that the same sort of body produces at one time one, and at another time another idea by the taste, than it makes a confusion in two ideas of white and sweet, or white and round, that the same piece of sugar produces them both in the mind at the same time. And the ideas of orange-colour and azure, that are produced in the mind by the same parcel of the infusion of *lignum nephriticum*, are no less distinct ideas, than those of the same colours, taken from two very different bodies.

§ 4. The comparing them one with another, in respect of extent, degrees, time, place, or any other circumstances, is another operation of the mind about its ideas, and is that upon which depends all that large tribe of ideas, comprehended under relations ; which of how vast an extent it is, I shall have occasion to consider hereafter.

§ 5. How far brutes partake in this faculty, is not easy to determine ; I imagine they have it not in any great degree : for though they probably have several ideas distinct enough, yet it seems to me to be the prerogative of human understanding, when it has sufficiently distinguished any ideas, so as to perceive them to be perfectly different, and so consequently two, to cast about and consider in what circumstances they are capable to be compared : and therefore, I think, beasts compare not their ideas farther than some sensible circumstances annexed to the objects themselves. The other power of comparing, which may be observed in men, belonging to general ideas, and useful only to abstract reasonings, we may probably conjecture beasts have not.

§ 6. The next operation we may observe in the mind about its ideas, is composition ; whereby it puts together several of those simple ones it has received from sensation and reflection, and combines them into complex ones. Under this of composition may be reckoned also that of enlarging ; wherein though the composition does not so much appear as in more complex ones, yet it is nevertheless a putting several ideas together, though of the same kind. Thus by adding several units together, we make the idea of a dozen ; and putting together the repeated ideas of several perches, we frame that of a furlong.

§ 7. In this also, I suppose, brutes come far short of men : for though they take in, and retain together several combinations of simple ideas, as possibly the shape, smell, and voice of his master make up the complex idea a dog has of him, or rather are so many distinct marks whereby he knows

him; yet I do not think they do of themselves ever compound them, and make complex ideas. And perhaps even where we think they have complex ideas, it is only one simple one that directs them in the knowledge of several things, which possibly they distinguish less by their sight than we imagine: for I have been credibly informed that a bitch will nurse, play with, and be fond of young foxes, as much as, and in place of, her puppies; if you can but get them once to suck her so long, that her milk may go through them. And those animals, which have a numerous brood of young ones at once, appear not to have any knowledge of their number: for though they are mightily concerned for any of their young that are taken from them whilst they are in sight or hearing; yet if one or two of them be stolen from them in their absence, or without noise, they appear not to miss them, or to have any sense that their number is lessened.

Naming. § 8. When children have, by repeated sensations, got ideas fixed in their memories, they begin by degrees to learn the use of signs. And when they have got the skill to apply the organs of speech to the framing of articulate sounds, they begin to make use of words, to signify their ideas to others. These verbal signs they sometimes borrow from others, and sometimes make themselves, as one may observe among the new and unusual names children often give to things in the first use of language.

Abstraction. § 9. The use of words then being to stand as outward marks of our internal ideas, and those ideas being taken from particular things, if every particular idea that we take in should have a distinct name, names must be endless. To prevent this, the mind makes the particular ideas, received from particular objects, to become general; which is done by considering them as they are in the mind, such appearances, separate from all other existences, and the circumstances of real existence, as time, place, or any other concomitant ideas. This is called abstraction, whereby ideas, taken from particular beings, become

general representatives of all of the same kind, and their names general names, applicable to whatever exists conformable to such abstract ideas. Such precise naked appearances in the mind, without considering how, whence, or with what others they came there, the understanding lays up (with names commonly annexed to them) as the standard to rank real existences into sorts, as they agree with these patterns, and to denominate them accordingly. Thus the same colour being observed to-day in chalk or snow, which the mind yesterday received from milk, it considers that appearance alone, makes it a representative of all of that kind; and having given it the name whiteness, it by that sound signifies the same quality, wheresoever to be imagined or met with: and thus universals, whether ideas or terms, are made.

§ 10. If it may be doubted, whether Brutes abstract not. beasts compound and enlarge their ideas that way to any degree; this, I think, I may be positive in, that the power of abstracting is not at all in them; and that the having of general ideas, is that which puts a perfect distinction betwixt man and brutes, and is an excellency which the faculties of brutes do by no means attain to. For it is evident we observe no footsteps in them of making use of general signs for universal ideas; from which we have reason to imagine, that they have not the faculty of abstracting, or making general ideas, since they have no use of words, or any other general signs.

§ 11. Nor can it be imputed to their want of fit organs to frame articulate sounds, that they have no use or knowledge of general words; since many of them, we find, can fashion such sounds, and pronounce words distinctly enough, but never with any such application. And on the other side, men, who through some defect in the organs want words, yet fail not to express their universal ideas by signs, which serve them instead of general words; a faculty which we see beasts come short in. And therefore I think we may suppose, that it is in this that the species of brutes are discriminated

from man ; and it is that proper difference wherein they are wholly separated, and which at last widens to so vast a distance : for if they have any ideas at all, and are not bare machines (as some would have them) we cannot deny them to have some reason. It seems as evident to me, that they do some of them in certain instances reason, as that they have sense ; but it is only in particular ideas, just as they received them from their senses. They are the best of them tied up within those narrow bounds, and have not (as I think) the faculty to enlarge them by any kind of abstraction.

Idiots and
madmen. § 12. How far idiots are concerned in the want or weakness of any, or all of the foregoing faculties, an exact observation of their several ways of faltering would no doubt discover : for those who either perceive but dully, or retain the ideas that come into their minds but ill, who cannot readily excite or compound them, will have little matter to think on. Those who cannot distinguish, compare, and abstract, would hardly be able to understand and make use of language, or judge or reason to any tolerable degree ; but only a little and imperfectly about things present, and very familiar to their senses. And indeed any of the forementioned faculties, if wanting, or out of order, produce suitable effects in men's understandings and knowledge.

§ 13. In fine, the defect in naturals seems to proceed from want of quickness, activity, and motion in the intellectual faculties, whereby they are deprived of reason ; whereas madmen, on the other side, seem to suffer by the other extreme : for they do not appear to me to have lost the faculty of reasoning ; but having joined together some ideas very wrongly, they mistake them for truths, and they err as men do that argue right from wrong principles. For by the violence of their imaginations, having taken their fancies for realities, they make right deductions from them. Thus you shall find a distracted man fancying himself a king, with a right inference require suitable attendance, respect and obedience ; others, who have thought themselves made

of glass, have used the caution necessary to preserve such brittle bodies. Hence it comes to pass that a man, who is very sober, and of a right understanding in all other things, may in one particular be as frantic as any in Bedlam; if either by any sudden very strong impression, or long fixing his fancy upon one sort of thoughts, incoherent ideas have been cemented together so powerfully, as to remain united. But there are degrees of madness, as of folly: the disorderly jumbling ideas together, is in some more, some less. In short, herein seems to lie the difference between idiots and madmen, that madmen put wrong ideas together, and so make wrong propositions, but argue and reason right from them; but idiots make very few or no propositions, and reason scarce at all.

§ 14. These, I think, are the first faculties and operations of the mind, which it makes use of in understanding; and though they are exercised about all its ideas in general, yet the instances I have hitherto given have been chiefly in simple ideas; and I have subjoined the explication of these faculties of the mind to that of simple ideas, before I come to what I have to say concerning complex ones, for these following reasons.

First, Because several of these faculties being exercised at first principally about simple ideas, we might, by following nature in its ordinary method, trace and discover them in their rise, progress, and gradual improvements.

Secondly, Because observing the faculties of the mind how they operate about simple ideas, which are usually, in most men's minds, much more clear, precise, and distinct than complex ones; we may the better examine and learn how the mind abstracts, denominates, compares, and exercises its other operations about those which are complex, wherein we are much more liable to mistake.

Thirdly, Because these very operations of the mind about ideas, received from sensations, are themselves, when reflected on, another set of ideas, derived from that other source of our knowledge which I call re-

flection, and therefore fit to be considered in this place after the simple ideas of sensation. Of compounding, comparing, abstracting, &c., I have but just spoken, having occasion to treat of them more at large in other places.

These are the beginnings of human knowledge. § 15. And thus I have given a short, and, I think, true history of the first beginnings of human knowledge, whence the mind has its first objects, and by what steps it makes its progress to the laying in and storing up those ideas, out of which is to be framed all the knowledge it is capable of; wherein I must appeal to experience and observation, whether I am in the right: the best way to come to truth, being to examine things as really they are, and not to conclude they are, as we fancy of ourselves, or have been taught by others to imagine.

Appeal to experience. § 16. To deal truly, this is the only way that I can discover, whereby the ideas of things are brought into the understanding: if other men have either innate ideas, or infused principles, they have reason to enjoy them; and if they are sure of it, it is impossible for others to deny them the privilege that they have above their neighbours. I can speak but of what I find in myself, and is agreeable to those notions; which, if we will examine the whole course of men in their several ages, countries, and educations, seem to depend on those foundations which I have laid, and to correspond with this method in all the parts and degrees thereof.

Dark room. § 17. I pretend not to teach, but to inquire, and therefore cannot but confess here again, that external and internal sensation are the only passages that I can find of knowledge to the understanding. These alone, as far as I can discover, are the windows by which light is let into this dark room: for methinks the understanding is not much unlike a closet wholly shut from light, with only some little opening left, to let in external visible resemblances, or ideas of things without: would the pictures coming into such a dark room but stay there, and lie so orderly

as to be found upon occasion, it would very much resemble the understanding of a man, in reference to all objects of sight, and the ideas of them.

These are my guesses concerning the means whereby the understanding comes to have and retain simple ideas, and the modes of them, with some other operations about them. I proceed now to examine some of these simple ideas, and their modes, a little more particularly.

CHAP. XII.

Of Complex Ideas.

§ 1. WE have hitherto considered those ideas, in the reception whereof the mind is only passive, which are those simple ones received from sensation and reflection before mentioned, whereof the mind cannot make one to itself, nor have any idea which does not wholly consist of them. But as the mind is wholly passive in the reception of all its simple ideas, so it exerts several acts of its own, whereby out of its simple ideas as the materials and foundations of the rest, the other are framed. The acts of the mind, wherein it exerts its power over its simple ideas, are chiefly these three: 1. Combining several simple ideas into one compound one, and thus all complex ideas are made. 2. The second is bringing two ideas, whether simple or complex, together, and setting them by one another, so as to take a view of them at once, without uniting them into one; by which way it gets all its ideas of relations. 3. The third is separating them from all other ideas that accompany them in their real existence; this is called abstraction: and thus all its general ideas are made. This shows man's power, and its ways of operation, to be much what the same in the material

and intellectual world. For the materials in both being such as he has no power over, either to make or destroy, all that man can do is either to unite them together, or to set them by one another, or wholly separate them. I shall here begin with the first of these in the consideration of complex ideas, and come to the other two in their due places. As simple ideas are observed to exist in several combinations united together, so the mind has a power to consider several of them united together as one idea; and that not only as they are united in external objects, but as itself has joined them. Ideas thus made up of several simple ones put together, I call complex; such as are beauty, gratitude, a man, an army, the universe; which though complicated of various simple ideas, or complex ideas made up of simple ones, yet are, when the mind pleases, considered each by itself as one entire thing, and signified by one name.

Made voluntarily. § 2. In this faculty of repeating and joining together its ideas, the mind has great power in varying and multiplying the objects of its thoughts, infinitely beyond what sensation or reflection furnishes it with; but all this still confined to those simple ideas which it received from those two sources, and which are the ultimate materials of all its compositions: for simple ideas are all from things themselves, and of these the mind can have no more, nor other than what are suggested to it. It can have no other ideas of sensible qualities than what come from without by the senses; nor any ideas of other kind of operations of a thinking substance than what it finds in itself; but when it has once got these simple ideas, it is not confined barely to observation, and what offers itself from without: it can, by its own power, put together those ideas it has, and make new complex ones, which it never received so united.

Are either modes, substances or relations. § 3. Complex ideas, however compounded and decomposed, though their number be infinite, and the variety endless, wherewith they fill and entertain the

thoughts of men; yet, I think, they may be all reduced under these three heads: 1. Modes. 2. Substances. 3. Relations.

§ 4. First, Modes I call such complex Modes. ideas, which, however compounded, contain not in them the supposition of subsisting by themselves, but are considered as dependencies on or affections of substances; such as are ideas signified by the words triangle, gratitude, murder, &c. And if in this I use the word mode in somewhat a different sense from its ordinary signification, I beg pardon; it being unavoidable in discourses, differing from the ordinary received notions, either to make new words, or to use old words in somewhat a new signification: the latter whereof, in our present case, is perhaps the more tolerable of the two.

§ 5. Of these modes, there are two Simple and sorts which deserve distinct consideration. mixed
First, there are some which are only va- modes.
riations, or different combinations of the same simple idea, without the mixture of any other; as a dozen or score; which are nothing but the ideas of so many distinct units added together: and these I call simple modes, as being contained within the bounds of one simple idea.

Secondly, there are others compounded of simple ideas of several kinds, put together to make one complex one; v. g. beauty, consisting of a certain composition of colour and figure, causing delight in the beholder; theft, which being the concealed change of the possession of any thing, without the consent of the proprietor, contains, as is visible, a combination of several ideas of several kinds: and these I call mixed modes.

§ 6. Secondly, the ideas of substances Substances
are such combinations of simple ideas, as single or
are taken to represent distinct particular collective.
things subsisting by themselves; in which the supposed or confused idea of substance, such as it is, is always the first and chief. Thus if to substance be joined the simple idea of a certain dull whitish co-

lour, with certain degrees of weight, hardness, ductility, and fusibility, we have the idea of lead, and a combination of the ideas of a certain sort of figure, with the powers of motion. Thought and reasoning, joined to substance, make the ordinary idea of a man. Now of substances also, there are two sorts of ideas; one of single substances, as they exist separately, as of a man or a sheep; the other of several of those put together, as an army of men, or flock of sheep: which collective ideas of several substances thus put together, are as much each of them one single idea, as that of a man, or an unit.

Relation. § 7. Thirdly, the last sort of complex ideas, is that we call relation, which consists in the consideration and comparing one idea with another. Of these several kinds we shall treat in their order.

The abstrusest ideas from the two sources. § 8. If we trace the progress of our minds, and with attention observe how it repeats, adds together, and unites its simple ideas received from sensation or reflection, it will lead us farther than at first perhaps we should have imagined. And I believe we shall find, if we warily observe the originals of our notions, that even the most abstruse ideas, how remote soever they may seem from sense, or from any operations of our own minds, are yet only such as the understanding frames to itself, by repeating and joining together ideas, that it had either from objects of sense, or from its own operations about them: so that those even large and abstract ideas are derived from sensation or reflection, being no other than what the mind, by the ordinary use of its own faculties, employed about ideas received from objects of sense, or from the operations it observes in itself about them, may and does attain unto. This I shall endeavour to show in the ideas we have of space, time, and infinity, and some few others, that seem the most remote from those originals.

CHAP. XIII.

Of Simple Modes, and first of the Simple Modes of Space.

§ 1. **THOUGH** in the foregoing part **I** Simple have often mentioned simple ideas, which Modes, are truly the materials of all our knowledge; yet having treated of them there, rather in the way that they come into the mind, than as distinguished from others more compounded, it will not be perhaps amiss to take a view of some of them again under this consideration, and examine those different modifications of the same idea: which the mind either finds in things existing, or is able to make within itself, without the help of any extrinsical object, or any foreign suggestion.

Those modifications of any one simple idea (which, as has been said, I call simple modes) are as perfectly different and distinct ideas in the mind, as those of the greatest distance or contrariety. For the idea of two is as distinct from that of one, as blueness from heat, or either of them from any number: and yet it is made up only of that simple idea of an unit repeated; and repetitions of this kind joined together, make those distinct simple modes, of a dozen, a gross, a million.

§ 2. I shall begin with the simple idea of space. I have showed above, chap. 4. that we ^{Idea of space.} get the idea of space, both by our sight and touch; which, I think, is so evident, that it would be as needless to go to prove that men perceive, by their sight, a distance between bodies of different colours, or between the parts of the same body, as that they see colours themselves; nor is it less obvious, that they can do so in the dark by feeling and touch.

§ 3. This space considered barely in Space and length between any two beings, without extension, considering any thing else between them,

is called distance ; if considered in length, breadth, and thickness, I think it may be called capacity. The term extension is usually applied to it in what manner soever considered.

Immensity. § 4. Each different distance is a different modification of space ; and each idea of any different distance, or space, is a simple mode of this idea. Men for the use, and by the custom of measuring, settle in their minds the ideas of certain stated lengths, such as are an inch, foot, yard, fathom, milc, diameter of the earth, &c. which are so many distinct ideas made up only of space. When any such stated lengths or measures of space are made familiar to men's thoughts, they can in their minds repeat them as often as they will without mixing or joining to them the idea of body, or any thing else ; and frame to themselves the ideas of long, square, or cubic, feet, yards, or fathoms, here amongst the bodies of the universe, or else beyond the utmost bounds of all bodies ; and by adding these still one to another, enlarge their ideas of space as much as they please. The power of repeating, or doubling any idea we have of any distance, and adding it to the former as often as we will, without being ever able to come to any stop or stint, let us enlarge it as much as we will, is that which gives us the idea of immensity.

Figure. § 5. There is another modification of this idea, which is nothing but the relation which the parts of the termination of extension, or circumscribed space, have amongst themselves. This the touch discovers in sensible bodies, whose extremities come within our reach ; and the eye takes both from bodies and colours, whose boundaries are within its view ; where observing how the extremities terminate either in straight lines, which meet at discernible angles ; or in crooked lines, wherein no angles can be perceived ; by considering these as they relate to one another, in all parts of the extremities of any body or space, it has that idea we call figure, which affords to the mind infinite variety. For besides the vast number of different figures, that do really exist in the

coherent masses of matter, the stock that the mind has in its power, by varying the idea of space, and thereby making still new compositions, by repeating its own ideas, and joining them as it pleases, is perfectly inexhaustible; and so it can multiply figures in infinitum.

§ 6. For the mind having a power to Figure. repeat the idea of any length directly stretched out, and join it to another in the same direction, which is to double the length of that straight line, or else join another with what inclination it thinks fit, and so make what sort of angle it pleases; and being able also to shorten any line it imagines, by taking from it one half, or one fourth, or what part it pleases, without being able to come to an end of any such divisions, it can make an angle of any bigness: so also the lines that are its sides, of what length it pleases; which joining again to other lines of different lengths, and at different angles, till it has wholly inclosed any space, it is evident, that it can multiply figures both in their shape and capacity, in infinitum; all which are but so many different simple modes of space.

The same that it can do with straight lines, it can also do with crooked, or crooked and straight together; and the same it can do in lines, it can also in superficies: by which we may be led into farther thoughts of the endless variety of figures, that the mind has a power to make, and thereby to multiply the simple modes of space.

§ 7. Another idea coming under this Place. head, and belonging to this tribe, is that we call place. As in simple space, we consider the relation of distance between any two bodies or points; so in our idea of place. we consider the relation of distance betwixt any thing, and any two or more points, which are considered as keeping the same distance one with another, and so considered as at rest: for when we find any thing at the same distance now, which it was yesterday, from any two or more points, which have not since changed their distance one with another, and with which we then compared it, we say it hath kept

the same place ; but if it hath sensibly altered its distance with either of those points, we say it hath changed its place : though vulgarly speaking, in the common notion of place, we do not always exactly observe the distance from these precise points ; but from larger portions of sensible objects, to which we consider the thing placed to bear relation, and its distance from which we have some reason to observe.

§ 8. Thus a company of chess-men, standing on the same squares of the chess-board, where we left them, we say they are all in the same place, or unmoved ; though perhaps the chess-board hath been in the mean time carried out of one room into another ; because we compared them only to the parts of the chess-board, which keep the same distance one with another. The chess-board, we also say, is in the same place it was, if it remain in the same part of the cabin, though perhaps the ship, which it is in, sails all the while : and the ship is said to be in the same place, supposing it kept the same distance with the parts of the neighbouring land ; though perhaps the earth hath turned round ; and so both chess-men, and board, and ship, have every one changed place, in respect of remoter bodies, which have kept the same distance one with another. But yet the distance from certain parts of the board, being that which determines the place of the chess-men ; and the distance from the fixed parts of the cabin (with which we made the comparison) being that which determined the place of the chess-board ; and the fixed parts of the earth, that by which we determined the place of the ship ; these things may be said to be in the same place in those respects : though their distance from some other things, which in this matter we did not consider, being varied, they have undoubtedly changed place in that respect ; and we ourselves shall think so, when we have occasion to compare them with those other.

§ 9. But this modification of distance we call place, being made by men, for their common use, that by it they might be able to design the particular position of things, where they had occasion for such designation ;

men consider and determine of this place, by reference to those adjacent things which best served to their present purpose, without considering other things, which to answer another purpose would better determine the place of the same thing. Thus in the chess-board, the use of the designation of the place of each chess-man, being determined only within that checquered piece of wood, it would cross that purpose, to measure it by any thing else : but when these very chess-men are put up in a bag, if any one should ask where the black king is, it would be proper to determine the place by the parts of the room it was in, and not by the chess-board ; there being another use of designing the place it is now in, than when in play it was on the chess-board, and so must be determined by other bodies. So if any one should ask, in what place are the verses, which report the story of Nisus and Euryalus, it would be very improper to determine this place, by saying, they were in such a part of the earth, or in Bodley's library : but the right designation of the place would be by the parts of Virgil's works ; and the proper answer would be, that these verses were about the middle of the ninth book of his *Æneid* ; and that they have been always constantly in the same place ever since Virgil was printed ; which is true, though the book itself hath moved a thousand times ; the use of the idea of place here being to know in what part of the book that story is, that so upon occasion we may know where to find it, and have recourse to it for use.

§ 10. That our idea of place is nothing Place. else but such a relative position of any thing, as I have before mentioned, I think is plain, and will be easily admitted, when we consider that we can have no idea of the place of the universe, though we can of all the parts of it ; because beyond that we have not the idea of any fixed, distinct, particular beings, in reference to which we can imagine it to have any relation of distance ; but all beyond it is one uniform space or expansion, wherein the mind finds no variety, no marks. For to say, that the world is somewhere, means no more than that it does exist : this, though a

phrase borrowed from place, signifying only its existence, not location ; and when one can find out, and frame in his mind, clearly and distinctly, the place of the universe, he will be able to tell us, whether it moves or stands still in the undistinguishable inane of infinite space : though it be true, that the word place has sometimes a more confused sense, and stands for that space which any body takes up ; and so the universe is in a place. The idea therefore of place we have by the same means that we get the idea of space, (whereof this is but a particular limited consideration) viz. by our sight and touch ; by either of which we receive into our minds the ideas of extension or distance.

Extension § 11. There are some that would per-
and body, suade us, that body and extension are the
not the same. same thing : who either change the signifi-
cation of words, which I would not suspect them of, they
having so severely condemned the philosophy of others,
because it hath been too much placed in the uncertain
meaning, or deceitful obscurity of doubtful or insigni-
ficant terms. If therefore they mean by body and ex-
tension the same that other people do, viz. by body,
something that is solid and extended, whose parts are
separable and moveable different ways ; and by exten-
sion, only the space that lies between the extremities of
those solid coherent parts, and which is possessed by
them : they confound very different ideas one with an-
other. For I appeal to every man's own thoughts, whe-
ther the idea of space be not as distinct from that of
solidity, as it is from the idea of scarlet colour ? It is
true, solidity cannot exist without extension, neither
can scarlet colour exist without extension : but this
hinders not, but that they are distinct ideas. Many
ideas require others as necessary to their existence or
conception, which yet are very distinct ideas. Motion
can neither be, nor be conceived without space ; and
yet motion is not space, nor space motion : space can
exist without it, and they are very distinct ideas ; and
so, I think, are those of space and solidity. Solidity
is so inseparable an idea from body, that upon that
depends its filling of space, its contact, impulse, and

communication of motion upon impulse. And if it be a reason to prove, that spirit is different from body, because thinking includes not the idea of extension in it; the same reason will be as valid, I suppose, to prove that space is not body, because it includes not the idea of solidity in it: space and solidity being as distinct ideas, as thinking and extension, and as wholly separable in the mind one from another. Body then and extension, it is evident, are two distinct ideas. For,

§ 12. First, Extension includes no solidity, nor resistance to the motion of body, as body docs.

§ 13. Secondly, The parts of pure space are inseparable one from the other; so that the continuity cannot be separated neither really, nor mentally. For I demand of any one to remove any part of it from another, with which it is continued, even so much as in thought. To divide and separate actually, is, as I think, by removing the parts one from another, to make two superficies, where before there was a continuity; and to divide mentally, is to make in the mind two superficies, where before there was a continuity, and consider them as removed one from the other; which can only be done in things considered by the mind as capable of being separated; and by separation, of acquiring new distinct superficies, which they then have not, but are capable of; but neither of these ways of separation, whether real or mental, is, as I think, compatible to pure space.

It is true, a man may consider so much of such a space, as is answerable or commensurate to a foot, without considering the rest; which is indeed a partial consideration, but not so much as mental separation, or division; since a man can no more mentally divide, without considering two superficies separate one from the other, than he can actually divide, without making two superficies disjoined one from the other: but a partial consideration is not separating. A man may consider light in the sun, without its heat; or mobility in body, without its extension, without thinking of their separation. One is only a partial consideration,

terminating in one alone ; and the other is a consideration of both, as existing separately.

§ 14. Thirdly, The parts of pure space are immoveable, which follows from their inseparability : motion being nothing but change of distance between any two things : but this cannot be between parts that are inseparable : which therefore must needs be at perpetual rest one amongst another.

Thus the determined idea of simple space distinguishes it plainly and sufficiently from body ; since its parts are inseparable, immoveable, and without resistance to the motion of body.

The definition of extension explains it not. § 15. If any one ask me, what this space, I speak of, is ? I will tell him, when he tells me what his extension is. For to say, as is usually done, that extension is to have partes extra partes, is to say only, that extension is extension : for what am I the better informed in the nature of extension, when I am told, that extension is to have parts that are extended, exterior to parts that are extended, i. e. extension consists of extended parts ? As if one asking, what a fibre was ? I should answer him, that it was a thing made up of several fibres : would he thereby be enabled to understand what a fibre was better than he did before ? Or rather, would he not have reason to think, that my design was to make sport with him, rather than seriously to instruct him ?

Division of beings into bodies and spirits, proves not space and body the same. § 16. Those who contend that space and body are the same, bring this dilemma : either this space is something or nothing ; if nothing be between two bodies, they must necessarily touch : if it be allowed to be something, they ask, whether it be body or spirit ? To which I answer, by another question, who told them that there was, or could be nothing but solid beings, which could not think, and thinking beings that were not extended ? which is all they mean by the terms body and spirit.

§ 17. If it be demanded (as usually it is) whether this space, void of body, be substance or accident ; I shall readily answer, I know not ; nor shall be ashamed to own my ignorance, till they that ask show me a clear distinct idea of substance.

Substance
which we
know not,
no proof
against
space with-
out body.

§ 18. I endeavour, as much as I can, to deliver myself from those fallacies which we are apt to put upon ourselves, by taking words for things. It helps not our ignorance, to feign a knowledge where we have none, by making a noise with sounds, without clear and distinct significations. Names made at pleasure neither alter the nature of things, nor make us understand them but as they are signs of and stand for determined ideas. And I desire those who lay so much stress on the sound of these two syllables, substance, to consider whether applying it, as they do, to the infinite incomprehensible God, to finite spirit, and to body, it be in the same sense ; and whether it stands for the same idea, when each of those three so different beings are called substances. If so, whether it will thence follow, that God, spirits, and body, agreeing in the same common nature of substance, differ not any otherwise, than in a bare different modification of that substance ; as a tree and a pebble being in the same sense body, and agreeing in the common nature of body, differ only in a bare modification of that common matter : which will be a very harsh doctrine. If they say, that they apply it to God, finite spirit, and matter, in three different significations ; and that it stands for one idea, when God is said to be a substance ; for another, when the soul is called substance ; and for a third, when a body is called so ; if the name substance stands for three several distinct ideas, they would do well to make known those distinct ideas, or at least to give three distinct names to them, to prevent in so important a notion the confusion and errors that will naturally follow from the promiscuous use of so doubtful a term ; which is so far from being suspected to have three distinct, that in ordinary use it has scarce one clear distinct signification ; and if they can thus

make three distinct ideas of substance, what hinders why another may not make a fourth?

Substance and acci-
dents, of lit-
tle use in
philosophy.

§ 19. They who first ran into the notion of accidents, as a sort of real beings that needed something to inhere in, were forced to find out the word substance to support them. Had the poor Indian philosopher (who imagined that the earth also wanted something to bear it up) but thought of this word substance, he needed not to have been at the trouble to find an elephant to support it, and a tortoise to support his elephant: the word substance would have done it effectually. And he that inquired, might have taken it for as good an answer from an Indian philosopher, that substance, without knowing what it is, is that which supports the earth; as we take it for a sufficient answer, and good doctrine, from our European philosophers, that substance, without knowing what it is, is that which supports accidents. So that of substance, we have no idea of what it is, but only a confused obscure one of what it does.

§ 20. Whatever a learned man may do here, an intelligent American, who inquired into the nature of things, would scarce take it for a satisfactory account, if desiring to learn our architecture, he should be told, that a pillar was a thing supported by a basis, and a basis something that supported a pillar. Would he not think himself mocked, instead of taught, with such an account as this? And a stranger to them would be very liberally instructed in the nature of books, and the things they contained, if he should be told, that all learned books consisted of paper and letters, and that letters were things inhering in paper, and paper a thing that held forth letters: a notable way of having clear ideas of letters and papers! But were the Latin words *inhærentia* and *substantia*, put into the plain English ones that answer them, and were called sticking on and under-propping, they would better discover to us the very great clearness there is in the doctrine of substance and accidents, and show of what use they are in deciding of questions in philosophy.

§ 21. But to return to our idea of space. A vacuum beyond the utmost bounds of body. If body be not supposed infinite, which I think no one will affirm, I would ask, Whether, if God placed a man at the extremity of corporeal beings, he could not stretch his hand beyond his body? If he could, then he would put his arm where there was before space without body; and if there he spread his fingers, there would still be space between them without body. If he could not stretch out his hand, it must be because of some external hindrance; for we suppose him alive, with such a power of moving the parts of his body that he hath now, which is not in itself impossible, if God so pleased to have it; (or at least it is not impossible for God so to move him :) and then I ask, Whether that which hinders his hand from moving outwards be substance or accident, something or nothing? And when they have resolved that, they will be able to resolve themselves what that is, which is or may be between two bodies at a distance, that is not body, and has no solidity. In the mean time, the argument is at least as good, that where nothing hinders (as beyond the utmost bounds of all bodies) a body put in motion may move on; as where there is nothing between, there two bodies must necessarily touch; for pure space between, is sufficient to take away the necessity of mutual contact: but bare space in the way, is not sufficient to stop motion. The truth is, these men must either own that they think body infinite, though they are loth to speak it out, or else affirm that space is not body. For I would fain meet with that thinking man, that can in his thoughts set any bounds to space, more than he can to duration; or by thinking hope to arrive at the end of either: and therefore, if his idea of eternity be infinite, so is his idea of immensity; they are both finite or infinite alike.

§ 22. Farther, those who assert the impossibility of space existing without matter, must not only make body infinite, but must also deny a power in God to annihilate any The power of annihilation proves a vacuum.

part of matter. No one, I suppose, will deny that God can put an end to all motion that is in matter, and fix all the bodies of the universe in a perfect quiet and rest, and continue them so long as he pleases. Whoever then will allow, that God can, during such a general rest, annihilate either this book, or the body of him that reads it, must necessarily admit the possibility of a vacuum; for it is evident, that the space that was filled by the parts of the annihilated body, will still remain, and be a space without body. For the circumambient bodies being in perfect rest, are a wall of adamant, and in that state make it a perfect impossibility for any other body to get into that space. And indeed the necessary motion of one particle of matter into the place from whence another particle of matter is removed, is but a consequence from the supposition of plenitude: which will therefore need some better proof than a supposed matter of fact, which experiment can never make out: our own clear and distinct ideas plainly satisfying us, that there is no necessary connexion between space and solidity, since we can conceive the one without the other. And those who dispute for or against a vacuum, do thereby confess they have distinct ideas of vacuum and plenum, i. e. that they have an idea of extension void of solidity, though they deny its existence: or else they dispute about nothing at all. For they who so much alter the signification of words, as to call extension body, and consequently make the whole essence of body to be nothing but pure extension without solidity, must talk absurdly whenever they speak of vacuum, since it is impossible for extension to be without extension. For vacuum, whether we affirm or deny its existence, signifies space without body, whose very existence no one can deny to be possible, who will not make matter infinite, and take from God a power to annihilate any particle of it.

Motion
proves a va-
cuum. § 23. But not to go so far as beyond
the utmost bounds of body in the universe,
nor appeal to God's omnipotency, to find
a vacuum, the motion of bodies that are in our view

and neighbourhood seems to me plainly to evince it. For I desire any one so to divide a solid body, of any dimension he pleases, as to make it possible for the solid parts to move up and down freely every way within the bounds of that superficies, if there be not left in it a void space, as big as the least part into which he has divided the said solid body. And if where the least particle of the body divided is as big as a mustard-seed, a void space equal to the bulk of a mustard-seed be requisite to make room for the free motion of the parts of the divided body within the bounds of its superficies, where the particles of matter are 100,000,000 less than a mustard-seed; there must also be a space void of solid matter, as big as 100,000,000 part of a mustard-seed; for if it hold in one, it will hold in the other, and so on in infinitum. And let this void space be as little as it will, it destroys the hypothesis of plenitude. For if there can be a space void of body equal to the smallest separate particle of matter now existing in nature, it is still space without body; and makes as great a difference between space and body, as if it were *μίγα χάσμα*, a distance as wide as any in nature. And therefore, if we suppose not the void space necessary to motion equal to the least parcel of the divided solid matter, but to $\frac{1}{100}$ or $\frac{1}{1000000}$ of it; the same consequence will always follow of space without matter.

§ 24. But the question being here, The ideas of space and body distinct.
 “whether the idea of space or extension be
 “the same with the idea of body,” it is
 not necessary to prove the real existence of
 a vacuum, but the idea of it; which it is plain men have when they inquire and dispute, whether there be a vacuum or no. For if they had not the idea of space without body, they could not make a question about its existence: and if their idea of body did not include in it something more than the bare idea of space, they could have no doubt about the plenitude of the world: and it would be as absurd to demand, whether there were space without body, as whether there were space without space, or body without body, since these were but different names of the same idea.

Extension
being inse-
parable
from body,
proves it not
the same.

§ 25. It is true, the idea of extension joins itself so inseparably with all visible, and most tangible qualities, that it suffers us to see no one, or feel very few external objects, without taking in impressions of extension too. This readiness of extension to make itself be taken notice of so constantly with other ideas, has been the occasion, I guess, that some have made the whole essence of body to consist in extension; which is not much to be wondered at, since some have had their minds, by their eyes and touch (the busiest of all our senses) so filled with the idea of extension, and as it were wholly possessed with it, that they allowed no existence to any thing that had not extension. I shall not now argue with those men, who take the measure and possibility of all being, only from their narrow and gross imaginations: but having here to do only with those who conclude the essence of body to be extension, because they say they cannot imagine any sensible quality of any body without extension; I shall desire them to consider, that had they reflected on their ideas of tastes and smells, as much as on those of sight and touch; nay, had they examined their ideas of hunger and thirst, and several other pains, they would have found, that they included in them no idea of extension at all; which is but an affection of body, as well as the rest, discoverable by our senses, which are scarce acute enough to look into the pure essences of things.

§ 26. If those ideas, which are constantly joined to all others, must therefore be concluded to be the essence of those things which have constantly those ideas joined to them, and are inseparable from them; then unity is without doubt the essence of every thing. For there is not any object of sensation or reflection, which does not carry with it the idea of one: but the weakness of this kind of argument we have already shown sufficiently.

Ideas of
space and
solidity dis-
tinct.

§ 27. To conclude, whatever men shall think concerning the existence of a vacuum, this is plain to me, that we have as clear an idea of space distinct from solidity, as

we have of solidity distinct from motion, or motion from space. We have not any two more distinct ideas, and we can as easily conceive space without solidity, as we can conceive body or space without motion; though it be ever so certain, that neither body nor motion can exist without space. But whether any one will take space to be only a relation resulting from the existence of other beings at a distance, or whether they will think the words of the most knowing king Solomon, "The heaven, and the heaven of heavens, cannot contain thee;" or those more emphatical ones of the inspired philosopher St. Paul, "In him we live, move, and have our being;" are to be understood in a literal sense, I leave every one to consider: only our idea of space is, I think, such as I have mentioned, and distinct from that of body. For whether we consider in matter itself the distance of its coherent solid parts, and call it, in respect of those solid parts, extension: or whether, considering it as lying between the extremities of any body in its several dimensions, we call it length, breadth, and thickness; or else, considering it as lying between any two bodies, or positive beings, without any consideration whether there be any matter or no between, we call it distance; however named or considered, it is always the same uniform simple idea of space, taken from objects about which our senses have been conversant; whereof having settled ideas in our minds, we can revive, repeat and add them one to another as often as we will, and consider the space or distance so imagined, either as filled with solid parts, so that another body cannot come there, without displacing and thrusting out the body that was there before; or else as void of solidity, so that a body of equal dimensions to that empty or pure space may be placed in it, without the removing or expulsion of any thing that was there. But, to avoid confusion in discourses concerning this matter, it were possibly to be wished that the name extension were applied only to matter, or the distance of the extremities of particular bodies; and the term expansion to space in general, with or without solid matter possessing it, so as to say

space is expanded, and body extended. But in this every one has liberty: I propose it only for the more clear and distinct way of speaking.

Men differ little in clear simple ideas. § 28. The knowing precisely what our words stand for, would, I imagine, in this as well as a great many other cases, quickly end the dispute. For I am apt to think that men, when they come to examine them, find their simple ideas all generally to agree, though in discourse with one another they perhaps confound one another with different names. I imagine that men who abstract their thoughts, and do well examine the ideas of their own minds, cannot much differ in thinking; however they may perplex themselves with words, according to the way of speaking of the several schools or sects they have been bred up in: though amongst unthinking men, who examine not scrupulously and carefully their own ideas, and strip them not from the marks men use for them, but confound them with words, there must be endless dispute, wrangling, and jargon; especially if they be learned bookish men, devoted to some sect, and accustomed to the language of it, and have learned to talk after others. But if it should happen, that any two thinking men should really have different ideas, I do not see how they could discourse or argue one with another. Here I must not be mistaken, to think that every floating imagination in men's brains is presently of that sort of ideas I speak of. It is not easy for the mind to put off those confused notions and prejudices it has imbibed from custom, inadvertency, and common conversation: It requires pains and assiduity to examine its ideas, till it resolves them into those clear and distinct simple ones, out of which they are compounded; and to see which, amongst its simple ones, have or have not a necessary connexion and dependence one upon another. Till a man doth this in the primary and original notion of things, he builds upon floating and uncertain principles, and will often find himself at a loss.

CHAP. XIV.

Of Duration, and its simple Modes.

§ 1. THERE is another sort of distance Duration is or length, the idea whereof we get not from the permanent parts of space, but from the fleeting and perpetually perishing parts of succession. This we call duration, the simple modes whereof are any different lengths of it, whereof we have distinct ideas, as hours, days, years, &c. time and eternity.

§ 2. The answer of a great man, to one who asked what time was, “Si non rogas Its idea from reflection on the train of our ideas. “intelligo,” (which amounts to this; the more I set myself to think of it, the less I understand it) might perhaps persuade one, that time, which reveals all other things, is itself not to be discovered. Duration, time, and eternity, are not without reason thought to have something very abstruse in their nature. But however remote these may seem from our comprehension, yet if we trace them right to their originals, I doubt not but one of those sources of all our knowledge, viz. sensation and reflection, will be able to furnish us with these ideas, as clear and distinct as many other which are thought much less obscure; and we shall find, that the idea of eternity itself is derived from the same common original with the rest of our ideas.

§ 3. To understand time and eternity aright, we ought with attention to consider what idea it is we have of duration, and how we came by it. It is evident to any one, who will but observe what passes in his own mind, that there is a train of ideas which constantly succeed one another in his understanding, as long as he is awake. Reflection on these appearances of several ideas, one after another, in our minds, is that which furnishes us with the idea of succession; and the distance between any parts of that succession, or between the

appearance of any two ideas in our minds, is that we call duration. For whilst we are thinking, or whilst we receive successively several ideas in our minds, we know that we do exist; and so we call the existence, or the continuation of the existence of ourselves, or any thing else, commensurate to the succession of any ideas in our minds, the duration of ourselves, or any such other thing coexistent with our thinking.

§ 4. That we have our notion of succession and duration from this original, viz. from reflection on the train of ideas which we find to appear one after another in our own minds, seems plain to me, in that we have no perception of duration, but by considering the train of ideas that take their turns in our understandings. When that succession of ideas ceases, our perception of duration ceases with it; which every one clearly experiments in himself, whilst he sleeps soundly, whether an hour or a day, a month or a year: of which duration of things, while he sleeps or thinks not, he has no perception at all, but it is quite lost to him; and the moment wherein he leaves off to think, till the moment he begins to think again, seems to him to have no distance. And so I doubt not it would be to a waking man, if it were possible for him to keep only one idea in his mind, without variation and the succession of others. And we see, that one who fixes his thoughts very intently on one thing, so as to take but little notice of the succession of ideas that pass in his mind, whilst he is taken up with that earnest contemplation, lets slip out of his account a good part of that duration, and thinks that time shorter than it is. But if sleep commonly unites the distant parts of duration, it is because during that time we have no succession of ideas in our minds. For if a man, during his sleep, dreams, and variety of ideas make themselves perceptible in his mind one after another; he hath then, during such dreaming, a sense of duration, and of the length of it. By which it is to me very clear, that men derive their ideas of duration from their reflections on the train of the ideas they observe to succeed one another in their own understandings;

without which observation they can have no notion of duration, whatever may happen in the world.

§ 5. Indeed, a man having, from reflecting on the succession and number of his own thoughts, got the notion or idea of duration, he can apply that notion to things which exist while he does not think; as he that has got the idea of extension from bodies by his sight or touch, can apply it to distances, where no body is seen or felt. And therefore though a man has no perception of the length of duration, which passed whilst he slept or thought not; yet having observed the revolution of days and nights, and found the length of their duration to be in appearance regular and constant, he can, upon the supposition that that revolution has proceeded after the same manner, whilst he was asleep or thought not, as it used to do at other times; he can, I say, imagine and make allowance for the length of duration, whilst he slept. But if Adam and Eve (when they were alone in the world) instead of their ordinary night's sleep, had passed the whole twenty-four hours in one continued sleep, the duration of that twenty-four hours had been irrecoverably lost to them, and been for ever left out of their account of time.

§ 6. Thus by reflecting on the appearing of various ideas one after another in our understandings, we get the notion of succession; which, if any one would think we did rather get from our observation of motion by our senses, he will perhaps be of my mind, when he considers that even motion produces in his mind an idea of succession, no otherwise than as it produces there a continued train of distinguishable ideas. For a man looking upon a body really moving, perceives yet no motion at all, unless that motion produces a constant train of successive ideas: v. g. a man becalmed at sea, out of sight of land, in a fair day, may look on the sun, or sea, or ship, a whole hour together, and perceive no motion at all in either; though it be certain that two, and perhaps all of them, have moved during that time a great way. But as soon as he per-

The idea of duration applicable to things whilst we sleep.

The idea of succession not from motion.

ceives either of them to have changed distance with some other body, as soon as this motion produces any new idea in him, then he perceives that there has been motion. But wherever a man is, with all things at rest about him, without perceiving any motion at all; if during this hour of quiet he has been thinking, he will perceive the various ideas of his own thoughts in his own mind, appearing one after another, and thereby observe and find succession where he could observe no motion.

§ 7. And this, I think, is the reason why motions very slow, though they are constant, are not perceived by us; because in their remove from one sensible part towards another, their change of distance is so slow, that it causes no new ideas in us, but a good while one after another: and so not causing a constant train of new ideas to follow one another immediately in our minds, we have no perception of motion; which consisting in a constant succession, we cannot perceive that succession without a constant succession of varying ideas arising from it.

§ 8. On the contrary, things that move so swift, as not to affect the senses distinctly with several distinguishable distances of their motion, and so cause not any train of ideas in the mind, are not also perceived to move: For any thing that moves round about in a circle, in less time than our ideas are wont to succeed one another in our minds, is not perceived to move; but seems to be a perfect entire circle of that matter or colour, and not a part of a circle in motion.

The train of ideas has a certain degree of quickness. § 9. Hence I leave it to others to judge, whether it be not probable, that our ideas do, whilst we are awake, succeed one another in our minds at certain distances, not much unlike the images in the inside of a lanthorn, turned round by the heat of a candle. This appearance of theirs in train, though perhaps it may be sometimes faster, and sometimes slower, yet, I guess, varies not very much in a waking men; there seem to be certain bounds to the quickness and slowness of the succession of those ideas one to another in

our minds, beyond which they can neither delay nor hasten.

§ 10. The reason I have for this odd conjecture, is from observing that in the impressions made upon any of our senses, we can but to a certain degree perceive any succession; which, if exceeding quick, the sense of succession is lost, even in cases where it is evident that there is a real succession. Let a cannon-bullet pass through a room, and in its way take with it any limb, or fleshy parts of a man; it is as clear as any demonstration can be, that it must strike successively the two sides of the room. It is also evident, that it must touch one part of the flesh first, and another after, and so in succession: And yet I believe nobody, who ever felt the pain of such a shot, or heard the blow against the two distant walls, could perceive any succession either in the pain or sound of so swift a stroke. Such a part of duration as this, wherein we perceive no succession, is that which we call an instant, and is that which takes up the time of only one idea in our minds, without the succession of another, wherein therefore we perceive no succession at all.

§ 11. This also happens, where the motion is so slow, as not to supply a constant train of fresh ideas to the senses, as fast as the mind is capable of receiving new ones into it; and so other ideas of our own thoughts, having room to come into our minds, between those offered to our senses by the moving body, there the sense of motion is lost; and the body, though it really moves, yet not changing perceivable distance with some other bodies, as fast as the ideas of our own minds do naturally follow one another in train, the thing seems to stand still, as is evident in the hands of clocks and shadows of sun-dials, and other constant but slow motions; where, though after certain intervals, we perceive by the change of distance that it hath moved, yet the motion itself we perceive not.

§ 12. So that to me it seems, that the constant and regular succession of ideas in a waking man is, as it were, the measure and standard of all other successions: whereof if any one either exceeds the pace of our ideas, as where

*This train
the measure
of other suc-
cessions.*

two sounds or pains, &c. take up in their succession the duration of but one idea, or else where any motion or succession is so slow, as that it keeps not pace with the ideas in our minds, or the quickness in which they take their turns; as when any one or more ideas, in their ordinary course, come into our mind, between those which are offered to the sight by the different perceptible distances of a body in motion, or between sounds or smells following one another: there also the sense of a constant continued succession is lost, and we perceive it not but with certain gaps of rest between.

The mind cannot fix long on one invariable idea. § 13. If it be so that the ideas of our minds, whilst we have any there, do constantly change and shift in a continual succession, it would be impossible, may any one say, for a man to think long of any one thing. By which, if it be meant, that a man may have one self-same single idea a long time alone in his mind, without any variation at all, I think, in matter of fact, it is not possible; for which (not knowing how the ideas of our minds are framed, of what materials they are made, whence they have their light, and how they come to make their appearances) I can give no other reason but experience: And I would have any one try whether he can keep one unvaried single idea in his mind, without any other, for any considerable time together.

§ 14. For trial, let him take any figure, any degree of light or whiteness, or what other he pleases; and he will, I suppose, find it difficult to keep all other ideas out of his mind: But that some, either of another kind, or various considerations of that idea (each of which considerations is a new idea) will constantly succeed one another in his thoughts, let him be as wary as he can.

§ 15. All that is in a man's power in this case, I think, is only to mind and observe what the ideas are that take their turns in his understanding; or else to direct the sort, and call in such as he hath a desire or use of; but hinder the constant succession of fresh ones, I think, he cannot, though he may commonly choose whether he will heedfully observe and consider them.

§ 16. Whether these several ideas in a man's mind be made by certain motions, I will not here dispute: but this I am sure, that they include no idea of motion in their appearance; and if a man had not the idea of motion otherwise, I think he would have none at all: which is enough to my present purpose, and sufficiently shows, that the notice we take of the ideas of our own minds, appearing there one after another, is that which gives us the idea of succession and duration, without which we should have no such ideas at all. It is not then motion, but the constant train of ideas in our minds, whilst we are waking, that furnishes us with the idea of duration: whereof motion no otherwise gives us any perception, than as it causes in our minds a constant succession of ideas, as I have before showed: And we have as clear an idea of succession and duration, by the train of other ideas succeeding one another in our minds, without the idea of any motion, as by the train of ideas caused by the uninterrupted sensible change of distance between two bodies, which we have from motion: and therefore we should as well have the idea of duration, were there no sense of motion at all.

§ 17. Having thus got the idea of duration, the next thing natural for the mind to do, is to get some measure of this common duration, whereby it might judge of its different lengths, and consider the distinct order wherein several things exist, without which a great part of our knowledge would be confused, and a great part of history be rendered very useless. This consideration of duration, as set out by certain periods, and marked by certain measures or epochs, is that, I think, which most properly we call time.

§ 18. In the measuring of extension, there is nothing more required but the application of the standard or measure we make use of to the thing, of whose extension we would be informed. But in the measuring of duration, this cannot be done, because no two different parts of succession can be put

Ideas, however made, include no sense of motion.

Time is duration set out by measures.

A good measure of time must divide its whole duration into equal periods.

together to measure one another : and nothing being a measure of duration but duration, as nothing is of extension but extension, we cannot keep by us any standing unvarying measure of duration, which consists in a constant fleeting succession, as we can of certain lengths of extension, as inches, feet, yards, &c. marked out in permanent parcels of matter. Nothing then could serve well for a convenient measure of time, but what has divided the whole length of its duration into apparently equal portions, by constantly repeated periods. What portions of duration are not distinguished, or considered as distinguished and measured by such periods, come not so properly under the notion of time, as appears by such phrases as these, viz. before all time, and when time shall be no more.

The revolutions of the sun and moon, the properest measures of time.

§ 19. The diurnal and annual revolutions of the sun, as having been, from the beginning of nature, constant, regular, and universally observable by all mankind, and supposed equal to one another, have been with reason made use of for the measure of duration. But the distinction of days and years having depended on the motion of the sun, it has brought this mistake with it, that it has been thought that motion and duration were the measure one of another: for men, in the measuring of the length of time, having been accustomed to the ideas of minutes, hours, days, months, years, &c. which they found themselves upon any mention of time or duration presently to think on, all which portions of time were measured out by the motion of those heavenly bodies; they were apt to confound time and motion, or at least to think that they had a necessary connexion one with another: whereas any constant periodical appearance, or alteration of ideas in seemingly equidistant spaces of duration, if constant and universally observable, would have as well distinguished the intervals of time, as those that have been made use of. For supposing the sun, which some have taken to be a fire, had been lighted up at the same distance of time that it now every day comes about to the same meridian, and then gone out again

about twelve hours after, and that in the space of an annual revolution, it had sensibly increased in brightness and heat, and so decreased again; would not such regular appearances serve to measure out the distances of duration to all that could observe it, as well without as with motion? For if the appearances were constant, universally observable, and in equidistant periods, they would serve mankind for measure of time as well, were the motion away.

§ 20. For the freezing of water, or the blowing of a plant, returning at equidistant periods in all parts of the earth, would as well serve men to reckon their years by, as the motions of the sun: and in effect we see, that some people in America counted their years by the coming of certain birds amongst them at their certain seasons, and leaving them at others. For a fit of an ague, the sense of hunger or thirst, a smell or a taste, or any other idea returning constantly at equidistant periods, and making itself universally be taken notice of, would not fail to measure out the course of succession, and distinguish the distances of time. Thus we see that men born blind count time well enough by years, whose revolutions yet they cannot distinguish by motions, that they perceive not: and I ask whether a blind man, who distinguished his years either by the heat of summer, or cold of winter; by the smell of any flower of the spring, or taste of any fruit of the autumn; would not have a better measure of time than the Romans had before the reformation of their calendar by Julius Cæsar, or many other people, whose years, notwithstanding the motion of the sun, which they pretend to make use of, are very irregular? And it adds no small difficulty to chronology, that the exact lengths of the years that several nations counted by, are hard to be known, they differing very much one from another, and I think I may say all of them from the precise motion of the sun. And if the sun moved from the creation to the flood constantly in the equator, and so equally dispersed its light and heat to all the habitable parts of the earth, in days all of the same length, with-

But not by
their motion
but periodical
appearances.

out its annual variations to the tropicks, as a late ingenious author supposes;* I do not think it very easy to imagine, that (notwithstanding the motion of the sun) men should in the antediluvian world from the beginning, count by years, or measure their time by periods, that had no sensible marks very obvious to distinguish them by.

§ 21. But perhaps it will be said without a regular motion, such as of the sun, or some other, how could it ever be known that such periods were equal? To which I answer, the equality of any other returning appearances might be known by the same way that that of days was known, or presumed to be so at first; which was only by judging of them by the train of ideas which had passed in men's minds in the intervals: by which train of ideas discovering inequality in the natural days, but none in the artificial days, the artificial days or *βυχθήμερα* were guessed to be equal, which was sufficient to make them serve for a measure; though exacter search has since discovered inequality in the diurnal revolutions of the sun, and we know not whether the annual also be not unequal. These yet, by their presumed and apparent equality, serve as well to reckon time by (though not to measure the parts of duration exactly) as if they could be proved to be exactly equal. We must therefore carefully distinguish betwixt duration itself, and the measures we make use of to judge of its length. Duration in itself is to be considered as going on in one constant, equal, uniform course: but none of the measures of it, which we make use of, can be known to do so; nor can we be assured, that their assigned parts or periods are equal in duration one to another; for two successive lengths of duration, however measured, can never be demonstrated to be equal. The motion of the sun, which the world used so long and so confidently for an exact measure of duration, has, as I said, been found in its several parts unequal: And though men have of late made use of a

* Dr. Burnet's Theory of the Earth.

pendulum, as a more steady and regular motion than that of the sun, or (to speak more truly) of the earth ; yet if any one should be asked how he certainly knows that the two successive swings of a pendulum are equal, it would be very hard to satisfy him, that they are infallibly so : since we cannot be sure, that the cause of that motion, which is unknown to us, shall always operate equally ; and we are sure that the medium in which the pendulum moves, is not constantly the same : Either of which varying, may alter the equality of such periods, and thereby destroy the certainty and exactness of the measure by motion, as well as any other periods of other appearances ; the notion of duration still remaining clear, though our measures of it cannot any of them be demonstrated to be exact. Since then no two portions of succession can be brought together, it is impossible ever certainly to know their equality. All that we can do for a measure of time is to take such as have continual successive appearances at seemingly equidistant periods ; of which seeming equality we have no other measure, but such as the train of our own ideas have lodged in our memories, with the concurrence of other probable reasons to persuade us of their equality.

§ 22. One thing seems strange to me, Time not the that whilst all men manifestly measured measure of time by the motion of the great and visible motion. bodies of the world, time yet should be defined to be the “ measure of motion ; ” whereas it is obvious to every one who reflects ever so little on it, that to measure motion, space is as necessary to be considered as time : and those who look a little farther, will find also the bulk of the thing moved necessary to be taken into the computation, by any one who will estimate or measure motion, so as to judge right of it. Nor indeed does motion any otherwise conduce to the measuring of duration, than as it constantly brings about the return of certain sensible ideas, in seeming equidistant periods. For if the motion of the sun were as unequal as of a ship driven by unsteady winds, sometimes very slow, and at others irregularly very swift ;

or if being constantly equally swift, it yet was not circular, and produced not the same appearances, it would not at all help us to measure time, any more than the seeming unequal motion of a comet does.

§ 23. Minutes, hours, days, and years, are then no more necessary to time or duration, than inches, feet, yards, and miles, marked out in any matter, are to extension : For though we in this part of the universe, by the constant use of them, as of periods set out by the revolutions of the sun, or as known parts of such periods, have fixed the ideas of such lengths of duration in our minds, which we apply to all parts of time, whose lengths we would consider; yet there may be other parts of the universe, where they no more use these measures of ours, than in Japan they do our inches, feet, or miles; but yet something analogous to them there must be. For without some regular periodical returns, we could not measure ourselves, or signify to others, the length of any duration, though at the same time the world were as full of motion as it is now, but no part of it disposed into regular and apparently equidistant revolutions. But the different measures that may be made use of for the account of time, do not at all alter the notion of duration, which is the thing to be measured; no more than the different standards of a foot and a cubit alter the notion of extension to those who make use of those different measures.

Our measure of time applicable to duration before time. § 24. The mind having once got such a measure of time as the annual revolution of the sun, can apply that measure to duration, wherein that measure itself did not exist, and with which, in the reality of its being, it had nothing to do : for should one say, that Abraham was born in the two thousand seven hundred and twelfth year of the Julian period, it is altogether as intelligible, as reckoning from the beginning of the world, though there were so far back no motion of the sun, nor any motion at all. For though the Julian period be supposed to begin several hundred years

before there were really either days, nights, or years, marked out by any revolutions of the sun; yet we reckon as right, and thereby measure durations as well, as if really at that time the sun had existed, and kept the same ordinary motion it doth now. The idea of duration equal to an annual revolution of the sun, is as easily applicable in our thoughts to duration, where no sun or motion was, as the idea of a foot or yard, taken from bodies here, can be applied in our thoughts to distances beyond the confines of the world, where are no bodies at all.

§ 25. For supposing it were five thousand six hundred and thirty-nine miles, or millions of miles, from this place to the remotest body of the universe (for being finite, it must be at a certain distance) as we suppose it to be five thousand six hundred and thirty-nine years from this time to the first existence of any body in the beginning of the world; we can, in our thoughts, apply this measure of a year to duration before the creation, or beyond the duration of bodies or motion, as we can this measure of a mile to space beyond the utmost bodies; and by the one measure duration where there was no motion, as well as by the other measure space in our thoughts, where there is no body.

§ 26. If it be objected to me here, that, in this way of explaining of time, I have begged what I should not, viz. that the world is neither eternal nor infinite; I answer, that to my present purpose it is not needful, in this place, to make use of arguments, to evince the world to be finite, both in duration and extension; but it being at least as conceivable as the contrary, I have certainly the liberty to suppose it, as well as any one hath to suppose the contrary: and I doubt not but that every one that will go about it, may easily conceive in his mind the beginning of motion, though not of all duration, and so may come to a stop and non ultra in his consideration of motion. So also in his thoughts he may set limits to body, and the extension belonging to it, but not to space where no body is; the utmost bounds of space and duration being beyond the reach of thought, as well as the utmost bounds of num-

ber are beyond the largest comprehension of the mind ; and all for the same reason, as we shall see in another place.

§ 27. By the same means therefore, and Eternity. from the same original that we come to have the idea of time, we have also that idea which we call eternity: viz. having got the idea of succession and duration, by reflecting on the train of our own ideas, caused in us either by the natural appearances of those ideas coming constantly of themselves into our waking thoughts, or else caused by external objects successively affecting our senses ; and having from the revolutions of the sun got the ideas of certain lengths of duration, we can, in our thoughts, add such lengths of duration to one another, as often as we please, and apply them, so added, to durations past or to come : and this we can continue to do on, without bounds or limits, and proceed in infinitum, and apply thus the length of the annual motion of the sun to duration, supposed before the sun's, or any other motion had its being ; which is no more difficult or absurd, than to apply the notion I have of the moving of a shadow one hour to-day upon the sun-dial to the duration of something last night, v. g. the burning of a candle, which is now absolutely separate from all actual motion : and it is as impossible for the duration of that flame for an hour last night to co-exist with any motion that now is, or for ever shall be, as for any part of duration, that was before the beginning of the world, to co-exist with the motion of the sun now. But yet this hinders not, but that having the idea of the length of the motion of the shadow on a dial between the marks of two hours, I can as distinctly measure in my thoughts the duration of that candle-light last night, as I can the duration of any thing that does now exist : And it is no more than to think, that had the sun shone then on the dial, and moved after the same rate it doth now, the shadow on the dial would have passed from one hour-line to another, whilst that flame of the candle lasted.

§ 28. The notion of an hour, day, or year, being only the idea I have of the length of certain periodical

regular motions, neither of which motions do ever all at once exist, but only in the ideas I have of them in my memory derived from my senses or reflection ; I can with the same ease, and for the same reason, apply it in my thoughts to duration antecedent to all manner of motion, as well as to any thing that is but a minute, or a day, antecedent to the motion, that at this very moment the sun is in. All things past are equally and perfectly at rest ; and to this way of consideration of them are all one, whether they were before the beginning of the world, or but yesterday : the measuring of any duration by some motion depending not at all on the real co-existence of that thing to that motion, or any other periods of revolution, but the having a clear idea of the length of some periodical known motion, or other intervals of duration in my mind, and applying that to the duration of the thing I would measure.

§ 29. Hence we see, that some men imagine the duration of the world, from its first existence to this present year 1689, to have been five thousand six hundred and thirty-nine years, or equal to five thousand six hundred and thirty-nine annual revolutions of the sun, and others a great deal more ; as the Egyptians of old, who in the time of Alexander counted twenty-three thousand years from the reign of the sun ; and the Chinese now, who account the world three millions two hundred and sixty-nine thousand years old, or more : which longer duration of the world, according to their computation, though I should not believe to be true, yet I can equally imagine it with them, and as truly understand, and say one is longer than the other, as I understand, that Methusalem's life was longer than Enoch's. And if the common reckoning of five thousand six hundred and thirty-nine should be true (as it may be as well as any other assigned) it hinders not at all my imagining what others mean when they make the world one thousand years older, since every one may with the same facility imagine (I do not say believe) the world to be fifty thousand years old, as five thousand six hundred and thirty-nine : and may as well conceive the duration of fifty thousand years, as five thousand six hundred and thirty-nine. Whereby it appears, that

to the measuring the duration of any thing by time, it is not requisite that that thing should be co-existent to the motion we measure by, or any other periodical revolution; but it suffices to this purpose, that we have the idea of the length of any regular periodical appearances, which we can in our minds apply to duration, with which the motion or appearance never co-existed.

§ 30. For as in the history of the creation, delivered by Moses, I can imagine that light existed three days before the sun was, or had any motion, barely by thinking, that the duration of light, before the sun was created, was so long as (if the sun had moved then, as it doth now) would have been equal to three of his diurnal revolutions; so by the same way I can have an idea of the chaos, or angels being created, before there was either light, or any continued motion, a minute, an hour, a day, a year, or one thousand years. For if I *can but consider duration equal to one minute, before* either the being or motion of any body, I can add one minute more till I come to sixty: and by the same way of adding minutes, hours, or years (i. e. such or such parts of the sun's revolutions, or any other period, whereof I have the idea) proceed in infinitum, and suppose a duration exceeding as many such periods as I can reckon, let me add whilst I will: which I think is the notion we have of eternity, of whose infinity we have no other notion, than we have of the infinity of number, to which we can add for ever without end.

§ 31. And thus I think it is plain, that from those two fountains of all knowledge before-mentioned, viz. reflection and sensation, we get ideas of duration, and the measures of it.

For, first, by observing what passes in our minds, how our ideas there in train constantly some vanish, and others begin to appear, we come by the idea of succession.

Secondly, by observing a distance in the parts of this succession, we get the idea of duration.

Thirdly, by sensation observing certain appearances, at certain regular and seeming equidistant periods, we get the ideas of certain lengths or measures of duration, as minutes, hours, days, years, &c.

Fourthly, by being able to repeat those measures of time, or ideas of stated length of duration in our minds, as often as we will, we can come to imagine duration, where nothing does really endure or exist; and thus we imagine to-morrow, next year, or seven years hence.

Fifthly, by being able to repeat ideas of any length of time as of a minute, a year, or an age, as often as we will in our own thoughts, and adding them one to another, without ever coming to the end of such addition any nearer than we can to the end of number, to which we can always add; we come by the idea of eternity, as the future eternal duration of our souls, as well as the eternity of that infinite Being, which must necessarily have always existed.

Sixthly, by considering any part of infinite duration, as set out by periodical measures, we come by the idea of what we call time in general.

CHAP. XV.

Of Duration and Expansion, considered together.

§ 1. Both capable of greater and less. THOUGH we have in the precedent chapters dwelt pretty long on the considerations of space and duration; yet they being ideas of general concernment, that have something very abstruse and peculiar in their nature, the comparing them one with another may perhaps be of use for their illustration; and we may have the more clear and distinct conception of them, by taking a view of them together. Distance or space, in its simple abstract conception, to avoid confusion, I call expansion, to distinguish it from extension, which by some is used to express this distance only as it is in the solid parts of matter, and so includes, or at least intimates the idea of body; whereas the idea of pure distance includes no such thing. I prefer also the word expansion to space, because space is often applied to distance of fleeting successive parts, which never exist together, as well as

to those which are permanent. In both these (viz. expansion and duration) the mind has this common idea of continued lengths, capable of greater or less quantities: for a man has as clear an idea of the difference of the length of an hour and a day, as of an inch and a foot.

Expansion
not bounded
by matter. § 2. The mind, having got the idea of the length of any part of expansion, let it be a span, or a pace, or what length you will, can, as has been said, repeat that idea; and so, adding it to the former, enlarge its idea of length, and make it equal to two spans, or two paces, and so as often as it will, till it equals the distance of any parts of the earth one from another, and increase thus, till it amounts to the distance of the sun, or remotest star. By such a progression as this, setting out from the place where it is, or any other place, it can proceed and pass beyond all those lengths, and find nothing to stop its going on, either in, or without body. It is true, we can easily in our thoughts come to the end of solid extension; the extremity and bounds of all body we have no difficulty to arrive at: but when the mind is there, it finds nothing to hinder its progress into this endless expansion; of that it can neither find nor conceive any end. Nor let any one say, that beyond the bounds of body, there is nothing at all, unless he will confine God within the limits of matter. Solomon, whose understanding was filled and enlarged with wisdom, seems to have other thoughts, when he says, "heaven, and the heaven of heavens, cannot contain thee:" and he, I think, very much magnifies to himself the capacity of his own understanding, who persuades himself, that he can extend his thoughts farther than God exists, or imagine any expansion where he is not.

Nor duration by motion. § 3. Just so is it in duration. The mind, having got the idea of any length of duration, can double, multiply, and enlarge it, not only beyond its own, but beyond the existence of all corporeal beings, and all the measures of time, taken from the great bodies of the world, and their motions. But yet every one easily admits, that though we make

duration boundless, as certainly it is, we cannot yet extend it beyond all being. God, every one easily allows, fills eternity; and it is hard to find a reason, why any one should doubt, that he likewise fills immensity. His infinite being is certainly as boundless one way as another; and methinks it ascribes a little too much to matter, to say, where there is no body, there is nothing.

§ 4. Hence, I think, we may learn the reason why every one familiarly, and without the least hesitation, speaks of, and supposes eternity, and sticks not to ascribe infinity to duration; but it is with more doubting and reserve, that many admit, or suppose the infinity of space. The reason whereof seems to me to be this, that duration and extension being used as names of affections belonging to other beings, we easily conceive in God infinite duration, and we cannot avoid doing so: but not attributing to him extension, but only to matter, which is finite, we are apter to doubt of the existence of expansion without matter; of which alone we commonly suppose it an attribute. And therefore when men pursue their thoughts of space, they are apt to stop at the confines of body; as if space were there at an end too, and reached no farther. Or if their ideas upon consideration carry them farther, yet they term what is beyond the limits of the universe imaginary space; as if it were nothing, because there is no body existing in it. Whereas duration, antecedent to all body, and to the motions which it is measured by, they never term imaginary; because it is never supposed void of some other real existence. And if the names of things may at all direct our thoughts towards the originals of men's ideas (as I am apt to think they may very much) one may have occasion to think by the name duration, that the continuation of existence, with a kind of resistance to any destructive force, and the continuation of solidity (which is apt to be confounded with, and, if we will look into the minute anatomical parts of matter, is little different from, hardness) were thought to have some analogy, and gave occasion to

Why men more easily admit infinite duration than infinite expansion.

words, so near of kin as *durare* and *durum esse*. And that *durare* is applied to the idea of hardness, as well as that of existence, we see in Horace, *epod.* xvi. "*ferro duravit secula.*" But be that as it will, this is certain, that whoever pursues his own thoughts, will find them sometimes launch out beyond the extent of body into the infinity of space or expansion; the idea whereof is distinct and separate from body, and all other things; which may (to those who please) be a subject of farther meditation.

Time to du- § 5. Time in general is to duration, as
ration is as place to expansion. They are so much of
place to those boundless oceans of eternity and im-
expansion. mensity, as is set out and distinguished from
the rest, as it were by land-marks: and so are made use
of to denote the position of finite real beings, in re-
spect one to another, in those uniform infinite oceans of
duration and space. These rightly considered are only
ideas of determinate distances, from certain known
points fixed in distinguishable sensible things, and sup-
posed to keep the same distance one from another.
From such points fixed in sensible beings we reckon,
and from them we measure our portions of those infi-
nite quantities; which, so considered, are that which
we call time and place. For duration and space being
in themselves uniform and boundless, the order and po-
sition of things, without such known settled points,
would be lost in them; and all things would lie jumbled
in an incurable confusion.

Time and § 6. Time and place, taken thus for
place are ta- determinate distinguishable portions of those
ken for so infinite abysses of space and duration,
much of ei- set out, or supposed to be distinguished
ther, as are from the rest by marks, and known boun-
set out by the daries, have each of them a two-fold ac-
existence ceptation.
and motion
of bodies.

First, Time in general is commonly taken for so much of infinite duration, as is measured by, and co-existent with the existence and motions of the great bodies of the universe, as far as we know any thing of

them; and in this sense time begins and ends with the frame of this sensible world, as in these phrases before-mentioned, before all time, or when time shall be no more. Place likewise is taken sometimes for that portion of infinite space, which is possessed by, and comprehended within the material world; and is thereby distinguished from the rest of expansion; though this may more properly be called extension, than place. Within these two are confined, and by the observable parts of them are measured and determined, the particular time or duration, and the particular extension and place, of all corporeal beings.

§ 7. Secondly, Sometimes the word time is used in a larger sense, and is applied to parts of that infinite duration, not that were really distinguished and measured out by this real existence, and periodical motions of bodies that were appointed from the beginning to be for signs, and for seasons, and for days, and years, and are accordingly our measures of time: but such other portions too of that infinite uniform duration, which we, upon any occasion, do suppose equal to certain lengths of measured time; and so consider them as bounded and determined. For if we should suppose the creation, or fall of the angels, was at the beginning of the Julian period, we should speak properly enough, and should be understood, if we said, it is a longer time since the creation of angels, than the creation of the world, by seven thousand six hundred and forty years: whereby we would mark out so much of that undistinguished duration, as we suppose equal to, and would have admitted seven thousand six hundred and forty annual revolutions of the sun, moving at the rate it now does. And thus likewise we sometimes speak of place, distance, or bulk, in the great inane beyond the confines of the world, when we consider so much of that space as is equal to, or capable to receive a body of any assigned dimensions, as a cubic foot; or do suppose a point in it at such a certain distance from any part of the universe.

Sometimes for so much of either, as we design by measures taken from the bulk or motion of bodies.

They belong to all beings. § 8. Where and when are questions belonging to all finite existences, and are by us always reckoned from some known parts of this sensible world, and from some certain epochs marked out to us by the motions observable in it. Without some such fixed parts or periods, the order of things would be lost to our finite understandings, in the boundless invariable oceans of duration and expansion; which comprehend in them all finite beings, and in their full extent belong only to the Deity. And therefore we are not to wonder that we comprehend them not, and do so often find our thoughts at a loss, when we would consider them either abstractly in themselves, or as any way attributed to the first incomprehensible being. But when applied to any particular finite beings, the extension of any body is so much of that infinite space, as the bulk of the body takes up. And place is the position of any body, when considered at a certain distance from some other. As the idea of the particular duration of any thing is an idea of that portion of infinite duration, which passes during the existence of that thing; so the time when the thing existed is the idea of that space of duration which passed between some known and fixed period of duration, and the being of that thing. One shows the distance of the extremities of the bulk or existence of the same thing, as that it is a foot square, or lasted two years; the other shows the distance of it in place, or existence, from other fixed points of space or duration, as that it was in the middle of Lincoln's-inn-fields, or the first degree of Taurus, and in the year of our Lord 1671, or the 1000 year of the Julian period: all which distances we measure by pre-conceived ideas of certain lengths of space and duration, as inches, feet, miles, and degrees; and in the other, minutes, days, and years, &c.

All the parts of extension are extension; and all the parts of duration are duration. § 9. There is one thing more wherein space and duration have a great conformity; and that is, though they are justly reckoned amongst our simple ideas, yet none of the distinct ideas we have of either is without all manner of com-

position * : it is the very nature of both of them to consist of parts : but their parts being all of the same kind, and without the mixture of any other idea, hinder them not from having a place amongst simple ideas. Could the mind, as in number, come to so small a part of extension or duration, as excluded divisibility, that would be, as it were, the indivisible unit, or idea ; by repetition of which it would make its more enlarged ideas of extension and duration. But since the mind is not able to frame an idea of any space without parts ; instead thereof it makes use of the common measures, which by familiar use, in each country, have imprinted themselves on the memory (as inches and feet ; or cubits and parasangs ; and so seconds, minutes, hours, days, and years in duration :) the mind makes use, I say, of such ideas as these, as simple ones ; and these are the component parts of larger ideas, which the mind, upon occasion, makes by the addition of such known

* It has been objected to Mr. Locke, that if space consists of parts, as it is confessed in this place, he should not have reckoned it in the number of simple ideas : because it seems to be inconsistent with what he says elsewhere, that a simple idea is uncompounded, and contains in it nothing but one uniform appearance or conception of the mind, and is not distinguishable into different ideas. It is farther objected, that Mr. Locke has not given in the eleventh chapter of the second book, where he begins to speak of simple ideas, an exact definition of what he understands by the word simple ideas. To these difficulties Mr. Locke answers thus : To begin with the last, he declares, that he has not treated his subject in an order perfectly scholastic, having not had much familiarity with those sort of books during the writing of his, and not remembering at all the method in which they are written ; and therefore his readers ought not to expect definitions regularly placed at the beginning of each new subject. Mr. Locke contents himself to employ the principal terms that he uses, so that from his use of them the reader may easily comprehend what he means by them. But with respect to the term simple idea, he has had the good luck to define that in the place cited in the objection ; and therefore there is no reason to supply that defect. The question then is to know, whether the idea of extension agrees with this definition ? which will effectually agree to it, if it be understood in the sense which Mr. Locke had principally in his view : for that composition which he designed to exclude in that definition, was a composition of different ideas in the mind, and not a composition of the same kind in a thing whose essence consists in having parts of the same kind, where you can never come to a part entirely exempted from this composition. So that if the

lengths which it is acquainted with. On the other side, the ordinary smallest measure we have of either is looked on as an unit in number, when the mind by division would reduce them into less fractions. Though on both sides, both in addition and division, either of space or duration, when the idea under consideration becomes very big or very small, its precise bulk becomes very obscure and confused; and it is the number of its repeated additions or divisions, that alone remains clear and distinct, as will easily appear to any one who will let his thoughts loose in the vast expansion of space, or divisibility of matter. Every part of duration is duration too; and every part of extension is extension, both of them capable of addition or division in infinitum. But the least portions of either of them, whereof we have clear and distinct ideas, may perhaps be fittest to be considered by us, as the simple ideas of that kind, out of which our complex modes of space,

idea of extension consists in having partes extra partes, (as the schools speak) it is always, in the sense of Mr. Locke, a simple idea; because the idea of having partes extra partes cannot be resolved into two other ideas. For the remainder of the objection made to Mr. Locke, with respect to the nature of extension, Mr. Locke was aware of it, as may be seen in § 9. chap. 15. of the second book, where he says, that “the least portion of space or extension, whereof we have a clear and distinct idea, may perhaps be the fittest to be considered by us as a simple idea of that kind, out of which our complex modes of space and extension are made up.” So that, according to Mr. Locke, it may very fitly be called a simple idea, since it is the least idea of space that the mind can form to itself, and that cannot be divided by the mind into any less, whereof it has in itself any determined perception. From whence it follows, that it is to the mind one simple idea; and that is sufficient to take away this objection: for it is not the design of Mr. Locke, in this place, to discourse of any thing but concerning the idea of the mind. But if this is not sufficient to clear the difficulty, Mr. Locke hath nothing more to add, but that if the idea of extension is so peculiar that it cannot exactly agree with the definition that he has given of those simple ideas, so that it differs in some manner from all others of that kind, he thinks it is better to leave it there exposed to this difficulty, than to make a new division in his favour. It is enough for Mr. Locke that his meaning can be understood. It is very common to observe intelligible discourses spoiled by too much subtilty in nice divisions. We ought to put things together as well as we can, doctrinæ causâ; but, after all, several things will not be bundled up together under our terms and ways of speaking.

extension, and duration, are made up, and into which they can again be distinctly revolved. Such a small part of duration may be called a moment, and is the time of one idea in our minds in the train of their ordinary succession there. The other, wanting a proper name, I know not whether I may be allowed to call a sensible point, meaning thereby the least particle of matter or space we can discern, which is ordinarily about a minute, and to the sharpest eyes seldom less than thirty seconds of a circle, whereof the eye is the centre.

§ 10. Expansion and duration have this Their parts farther agreement, that though they are both inseparable. considered by us as having parts, yet their parts are not separable one from another, no not even in thought: though the parts of bodies from whence we take our measure of the one, and the parts of motion, or rather the succession of ideas in our minds, from whence we take the measure of the other, may be interrupted and separated; as the one is often by rest, and the other is by sleep, which we call rest too.

§ 11. But there is this manifest dif- Duration is ference between them, that the ideas of as a line, expansion as a length, which we have of expansion, are solid. turned every way, and so make figure, and breadth, and thickness: but duration is but as it were the length of one straight line, extended in infinitum, not capable of multiplicity, variation, or figure; but is one common measure of all existence whatsoever, wherein all things, whilst they exist, equally partake. For this present moment is common to all things that are now in being, and equally comprehends that part of their existence, as much as if they were all but one single being; and we may truly say, they all exist in the same moment of time. Whether angels and spirits have any analogy to this, in respect to expansion, is beyond my comprehension: and perhaps for us, who have understandings and comprehensions suited to our own preservation, and the ends of our own being, but not to the reality and extent of all other beings; it is near as hard to conceive any existence, or to have an idea of any real being, with a perfect negation of all manner of expan-

sion ; as it is to have the idea of any real existence, with a perfect negation of all manner of duration ; and therefore what spirits have to do with space, or how they communicate in it, we know not. All that we know is, that bodies do each singly possess its proper portion of it, according to the extent of solid parts ; and thereby exclude all other bodies from having any share in that particular portion of space, whilst it remains there.

Duration has never two parts together, expansion all together.

§ 12. Duration, and time which is a part of it, is the idea we have of perishing distance, of which no two parts exist together, but follow each other in succession ; as expansion is the idea of lasting distance, all whose parts exist together, and are not capable of succession. And therefore though we cannot conceive any duration without succession, nor can put it together in our thoughts, that any being does now exist to-morrow, or possess at once more than the present moment of duration ; yet we can conceive the eternal duration of the Almighty far different from that of man, or any other finite being. Because man comprehends not in his knowledge, or power, all past and future things ; his thoughts are but of yesterday, and he knows not what to-morrow will bring forth. What is once past he can never recall ; and what is yet to come he cannot make present. What I say of man I say of all finite beings ; who, though they may far exceed man in knowledge and power, yet are no more than the meanest creature, in comparison with God himself. Finite of any magnitude holds not any proportion to infinite. God's infinite duration being accompanied with infinite knowledge and infinite power, he sees all things past and to come ; and they are no more distant from his knowledge, no farther removed from his sight, than the present : they all lie under the same view ; and there is nothing which he cannot make exist each moment he pleases. For the existence of all things depending upon his good pleasure, all things exist every moment that he thinks fit to have them exist. To conclude, expansion and duration do mutually embrace and comprehend each other ; every part of space being in every part of du-

ration, and every part of duration in every part of expansion. Such a combination of two distinct ideas is, I suppose, scarce to be found in all that great variety we do or can conceive, and may afford matter to farther speculation.

CHAP. XVI.

Of Number.

§ 1. AMONGST all the ideas we have, as there is none suggested to the mind by more ways, so there is none more simple, than that of unity, or one. It has no shadow of variety or composition in it: every object our senses are employed about, every idea in our understandings, every thought of our minds, brings this idea along with it. And therefore it is the most intimate to our thoughts, as well as it is, in its agreement to all other things, the most universal idea we have. For number applies itself to men, angels, actions, thoughts, every thing that either doth exist, or can be imagined.

§ 2. By repeating this idea in our minds, and adding the repetitions together, we come by the complex ideas of the modes of it. Thus by adding one to one, we have the complex idea of a couple; by putting twelve units together, we have the complex idea of a dozen; and so of a score, or a million, or any other number.

§ 3. The simple modes of numbers are of all other the most distinct; every least variation, which is an unit, making each combination as clearly different from that which approacheth nearest to it, as the most remote: two being as distinct from one, as two hundred; and the idea of two as distinct from the idea of three, as the magnitude of the whole earth is from that of a mite. This is not so in other simple modes, in which it is not so easy,

nor perhaps possible for us to distinguish betwixt two approaching ideas, which yet are really different. For who will undertake to find a difference between the white of this paper, and that of the next degree to it; or can form distinct ideas of every the least excess in extension?

Therefore demonstrations in numbers the most precise. § 4. The clearness and distinctness of each mode of number from all others, even those that approach nearest, makes me apt to think that demonstrations in numbers, if they are not more evident and exact than in extension, yet they are more general in their use, and more determinate in their application. Because the ideas of numbers are more precise and distinguishable than in extension, where every equality and excess are not so easy to be observed or measured; because our thoughts cannot in space arrive at any determined smallness, beyond which it cannot go, as an unit: and therefore the quantity or proportion of any the least excess cannot be discovered: which is clear otherwise in number, where, as has been said, ninety-one is as distinguishable from ninety, as from nine thousand, though ninety-one be the next immediate excess to ninety. But it is not so in extension, where whatsoever is more than just a foot or an inch, is not distinguishable from the standard of a foot or an inch; and in lines which appear of an equal length, one may be longer than the other by innumerable parts; nor can any one assign an angle, which shall be the next biggest to a right one.

Names necessary to numbers.

§ 5. By the repeating, as has been said, the idea of an unit, and joining it to another unit, we make thereof one collective idea, marked by the name two. And whosoever can do this, and proceed on still, adding one more to the last collective idea which he had of any number, and give a name to it, may count, or have ideas for several collections of units, distinguished one from another, as far as he hath a series of names for following numbers, and a memory to retain that series, with their several names: all numeration being but still the adding of one unit more, and giving to the whole together, as com-

prehended in one idea, a new or distinct name or sign, whereby to know it from those before and after, and distinguish it from every smaller or greater multitude of units. So that he that can add one to one, and so to two, and so go on with his tale, taking still with him the distinct names belonging to every progression; and so again, by subtracting an unit from each collection, retreat and lessen them; is capable of all the ideas of numbers within the compass of his language, or for which he hath names, though not perhaps of more. For the several simple modes of numbers, being in our minds but so many combinations of units, which have no variety, nor are capable of any other difference but more or less, names or marks for each distinct combination seem more necessary than in any other sort of ideas. For without such names or marks, we can hardly well make use of numbers in reckoning, especially where the combination is made up of any great multitude of units; which put together without a name or mark, to distinguish that precise collection, will hardly be kept from being a heap in confusion.

§ 6. This I think to be the reason, why some Americans I have spoken with, (who were otherwise of quick and rational parts enough) could not, as we do, by any means count to one thousand; nor had any distinct idea of that number, though they could reckon very well to twenty. Because their language being scanty and accommodated only to the few necessities of a needy simple life, unacquainted either with trade or mathematics, had no words in it to stand for one thousand; so that when they were discoursed with of those great numbers, they would show the hairs of their head, to express a great multitude which they could not number: which inability, I suppose, proceeded from their want of names. The Tououpinambos had no names for numbers above five; any number beyond that they made out by showing their fingers, and the fingers of others who were present*. And I doubt

* Histoire d'un voyage, fait en la terre du Brasil, par Jean de Lery, c. 20. $\frac{3}{4}$ et $\frac{1}{2}$.

not but we ourselves might distinctly number in words a great deal farther than we usually do, would we find out by some fit denomination to signify them by; whereas in the way we take now to name them by millions of millions of millions, &c. it is hard to go beyond eighteen, or at most four and twenty decimal progressions, without confusion. But to show how much distinct names conduce to our well reckoning, or having useful ideas of numbers, let us set all these following figures in one continued line, as the marks of one number; v. g.

<i>Nonillions.</i>	<i>Octillions.</i>	<i>Septillions.</i>	<i>Sextillions.</i>	<i>Quintrillions.</i>
857324	162486	345896	437918	423147
<i>Quatrillions.</i>	<i>Trillions.</i>	<i>Billions.</i>	<i>Millions.</i>	<i>Units.</i>
248106	235421	261734	368149	623137

The ordinary way of naming this number in English, will be the often repeating of millions, of millions, of millions, of millions, of millions, of millions, of millions, of millions, (which is the denomination of the second six figures). In which way it will be very hard to have any distinguishing notions of this number: but whether, by giving every six figures a new and orderly denomination, these, and perhaps a great many more figures in progression, might not easily be counted distinctly, and ideas of them both got more easily to ourselves, and more plainly signified to others, I leave it to be considered. This I mention only to show how necessary distinct names are to numbering, without pretending to introduce new ones of my invention.

Why children number names to mark the several progressions of not earlier. numbers, or not having yet the faculty to collect scattered ideas into complex ones, and range them in a regular order, and so retain them in their memories, as is necessary to reckoning: do not begin to number, very early, nor proceed in it very far or steadily, till a good while after they are well furnished with good store of other ideas: and one may often observe them discourse and reason pretty well, and have very clear conceptions of several other things, before

they can tell twenty. And some, through the default of their memories, who cannot retain the several combinations of numbers, with their names annexed in their distinct orders, and the dependence of so long a train of numeral progressions, and their relation one to another, are not able all their life-time to reckon, or regularly go over any moderate series of numbers. For he that will count twenty, or have any idea of that number, must know that nineteen went before, with the distinct name or sign of every one of them, as they stand marked in their order; for wherever this fails, a gap is made, the chain breaks, and the progress in numbering can go no farther. So that to reckon right, it is required, 1. That the mind distinguish carefully two ideas, which are different one from another only by the addition or subtraction of one unit. 2. That it retain in memory the names or marks of the several combinations, from an unit to that number; and that not confusedly, and at random, but in that exact order, that the numbers follow one another: in either of which, if it trips, the whole business of numbering will be disturbed, and there will remain only the confused idea of multitude, but the ideas necessary to distinct numeration will not be attained to.

§ 8. This farther is observable in num- Number
bers, that it is that which the mind makes measures
use of in measuring all things that by us all measur-
are measurable, which principally are ex- ables.
pansion and duration; and our idea of infinity, even when applied to those, seems to be nothing but the infinity of number. For what else are our ideas of eternity and immensity, but the repeated additions of certain ideas of imagined parts of duration and expansion, with the infinity of number, in which we can come to no end of addition? For such an inexhaustible stock, number (of all other our ideas) most clearly furnishes us with, as is obvious to every one. For let a man collect into one sum as great a number as he pleases, this multitude, how great soever, lessens not one jot the power of adding to it, or brings him any nearer the end of the inexhaustible stock of number,

where still there remains as much to be added, as if none were taken out. And this endless addition or addibility (if any one like the word better) of numbers, so apparent to the mind, is that, I think, which gives us the clearest and most distinct idea of infinity: of which more in the following chapter.

CHAP. XVII.

Of Infinity.

Infinity, in its original intention, attributed to space, duration, and number.

§ 1. HE that would know what kind of idea it is to which we give the name of infinity, cannot do it better, than by considering to what infinity is by the mind more immediately attributed, and then how the mind comes to frame it.

Finite and infinite seem to me to be looked upon by the mind as the modes of quantity, and to be attributed primarily in their first designation only to those things which have parts, and are capable of increase or diminution, by the addition or subtraction of any the least part: and such are the ideas of space, duration, and number, which we have considered in the foregoing chapters. It is true, that we cannot but be assured, that the great God, of whom and from whom are all things, is incomprehensibly infinite: but yet when we apply to that first and supreme being our idea of infinite, in our weak and narrow thoughts, we do it primarily in respect to his duration and ubiquity; and, I think, more figuratively to his power, wisdom, and goodness, and other attributes, which are properly inexhaustible and incomprehensible, &c. For, when we call them infinite, we have no other idea of this infinity, but what carries with it some reflection on, and imitation of, that number or extent of the acts or objects of God's power, wisdom, and goodness, which can never be supposed so great or so many, which these attributes will not always surmount and exceed, let us multiply them in our thoughts as far as we can, with

all the infinity of endless number. I do not pretend to say how these attributes are in God, who is infinitely beyond the reach of our narrow capacities. They do, without doubt, contain in them all possible perfection: but this, I say, is our way of conceiving them, and these our ideas of their infinity.

§ 2. Finite then, and infinite, being by The idea of the mind looked on as modifications of ex- finite easily got.
pansion and duration, the next thing to be considered, is, how the mind comes by them. As for the idea of finite, there is no great difficulty. The obvious portions of extension that affect our senses, carry with them into the mind the idea of finite: and the ordinary periods of succession, whereby we measure time and duration, as hours, days, and years, are bounded lengths. The difficulty is, how we come by those boundless ideas of eternity and immensity, since the objects we converse with, come so much short of any approach or proportion to that largeness.

§ 3. Every one that has any idea of any How we come by the idea of infinity.
stated lengths of space, as a foot, finds that he can repeat that idea; and, joining it to the former, make the idea of two feet; and by the addition of a third, three feet; and so on, without ever coming to an end of his addition, whether of the same idea of a foot, or if he pleases of doubling it, or any other idea he has of any length, as a mile, or diameter of the earth, or of the orbis magnus: for whichever of these he takes, and how often soever he doubles, or any otherwise multiplies it, he finds that after he has continued his doubling in his thoughts, and enlarged his idea as much as he pleases, he has no more reason to stop, nor is one jot nearer the end of such addition, than he was at first setting out. The power of enlarging his idea of space by farther additions remaining still the same, he hence takes the idea of infinite space.

§ 4. This, I think, is the way whereby Our idea of space boundless.
the mind gets the idea of infinite space. It is a quite different consideration, to examine whether the mind has the idea of such

a boundless space actually existing, since our ideas are not always proofs of the existence of things; but yet, since this comes here in our way, I suppose I may say, that we are apt to think that space in itself is actually boundless; to which imagination, the idea of space or expansion of itself naturally leads us. For it being considered by us, either as the extension of body, or as existing by itself, without any solid matter taking it up (for of such a void space we have not only the idea, but I have proved as I think, from the motion of body, its necessary existence) it is impossible the mind should be ever able to find or suppose any end of it, or be stopped any where in its progress in this space, how far soever it extends its thoughts. Any bounds made with body, even adamant walls, are so far from putting a stop to the mind in its farther progress in space and extension, that it rather facilitates and enlarges it: for so far as that body reaches, so far no one can doubt of extension; and when we are come to the utmost extremity of body, what is there that can there put a stop, and satisfy the mind that it is at the end of space, when it perceives that it is not; nay, when it is satisfied that body itself can move into it? For if it be necessary for the motion of body, that there should be an empty space, though ever so little, here amongst bodies; and if it be possible for body to move in or through that empty space; nay it is impossible for any particle of matter to move but into an empty space; the same possibility of a body's moving into a void space, beyond the utmost bounds of body, as well as into a void space interspersed amongst bodies, will always remain clear and evident: the idea of empty pure space, whether within or beyond the confines of all bodies, being exactly the same, differing not in nature, though in bulk: and there being nothing to hinder body from moving into it. So that wherever the mind places itself by any thought, either amongst or remote from all bodies, it can in this uniform idea of space nowhere find any bounds, any end; and so must necessarily conclude it, by the very nature and idea of each part of it, to be actually infinite.

§ 5. As by the power we find in ourselves of repeating, as often as we will, any idea of space, we get the idea of immensity ; so, by being able to repeat the idea of any length of duration we have in our minds, with all the endless addition of number, we come by the idea of eternity. For we find in ourselves, we can no more come to an end of such repeated ideas, than we can come to the end of number, which every one perceives he cannot. But here again it is another question, quite different from our having an idea of eternity, to know whether there were any real being, whose duration has been eternal. And as to this, I say, he that considers something now existing, must necessarily come to something eternal. But having spoke of this in another place, I shall say here no more of it, but proceed on to some other considerations of our idea of infinity.

§ 6. If it be so, that our idea of infinity be got from the power we observe in ourselves of repeating without end our own ideas ; it may be demanded, “ why we do not attribute infinite to other ideas, as well as those of space and duration ; ” since they may be as easily, and as often repeated in our minds, as the other ; and yet nobody ever thinks of infinite sweetness, or infinite whiteness, though he can repeat the idea of sweet or white, as frequently as those of a yard, or a day ? To which I answer, all the ideas that are considered as having parts, and are capable of increase by the addition of any equal or less parts, afford us by their repetition the idea of infinity ; because with this endless repetition, there is continued an enlargement, of which there can be no end. But in other ideas it is not so ; for to the largest idea of extension or duration that I at present have, the addition of any the least part makes an increase ; but to the perfectest idea I have of the whitest whiteness, if I add another of a less or equal whiteness, (and of a whiter than I have, I cannot add the idea) it makes no increase, and enlarges not my idea at all : and therefore the different ideas of whiteness, &c. are called degrees. For those ideas that consist of parts are capa-

And so of
duration.

Why other
ideas are not
capable of
infinity.

ble of being augmented by every addition of the least part ; but if you take the idea of white, which one parcel of snow yielded yesterday to our sight, and another idea of white from another parcel of snow you see to-day, and put them together in your mind, they embody, as it were, and run into one, and the idea of whiteness is not at all increased ; and if we add a less degree of whiteness to a greater, we are so far from increasing that we diminish it. Those ideas that consist not of parts cannot be augmented to what proportion men please, or be stretched beyond what they have received by their senses ; but space, duration, and number, being capable of increase by repetition, leave in the mind an idea of endless room for more : nor can we conceive any where a stop to a farther addition or progression, and so those ideas alone lead our minds towards the thought of infinity.

Difference
between in-
finity of
space, and
space infi-
nite.

§ 7. Though our idea of infinity arise from the contemplation of quantity, and the endless increase the mind is able to make in quantity, by the repeated additions of what portions thereof it pleases ; yet I guess we cause great confusion in our thoughts, when we join infinity to any supposed idea of quantity the mind can be thought to have, and so discourse or reason about an infinite quantity, viz. an infinite space, or an infinite duration. For our idea of infinity being as I think, an endless growing idea, by the idea of any quantity the mind has, being at that time terminated in that idea, (for be it as great as it will, it can be no greater than it is) to join infinity to it, is to adjust a standing measure to a growing bulk ; and therefore I think it is not an insignificant subtilty, if I say that we are carefully to distinguish between the idea of the infinity of space, and the idea of a space infinite : the first is nothing but a supposed endless progression of the mind, over what repeated ideas of space it pleases ; but to have actually in the mind the idea of a space infinite, is to suppose the mind already passed over, and actually to have a view of all those repeated ideas of space, which

an endless repetition can never totally represent to it ; which carries in it a plain contradiction.

§ 8. This, perhaps, will be a little plainer, if we consider it in numbers. The infinity of numbers, to the end of whose addition every one perceives there is no approach, easily appears to any one that reflects on it : but how clear soever this idea of the infinity of number be, there is nothing yet more evident, than the absurdity of the actual idea of an infinite number. Whatsoever positive ideas we have in our minds of any space, duration, or number, let them be ever so great, they are still finite ; but when we suppose an inexhaustible remainder, from which we remove all bounds, and wherein we allow the mind an endless progression of thought, without ever completing the idea, there we have our idea of infinity ; which though it seems to be pretty clear when we consider nothing else in it but the negation of an end, yet when we would frame in our minds the idea of an infinite space or duration, that idea is very obscure and confused, because it is made up of two parts, very different, if not inconsistent. For let a man frame in his mind an idea of any space or number, as great as he will : it is plain the mind rests and terminates in that idea, which is contrary to the idea of infinity, which consists in a supposed endless progression. And therefore I think it is, that we are so easily confounded, when we come to argue and reason about infinite space or duration, &c. Because the parts of such an idea not being perceived to be, as they are, inconsistent, the one side or other always perplexes, whatever consequences we draw from the other ; as an idea of motion not passing on would perplex any one, who should argue from such an idea, which is not better than an idea of motion at rest : and such another seems to me to be the idea of a space, or (which is the same thing) a number infinite, i. e. of a space or number which the mind actually has, and so views and terminates in ; and of a space or number, which in a constant and endless enlarging and progression, it can in thought never attain to. For how large soever an idea of space I have in my mind, it is

no larger than it is that instant that I have it, though I be capable the next instant to double it, and so on in infinitum: for that alone is infinite which has no bounds; and that the idea of infinity, in which our thoughts can find none.

Number af- § 9. But of all other ideas it is num-
fords us the ber, as I have said, which I think fur-
clearest idea nishes us with the clearest and most distinct
of infinity. idea of infinity we are capable of. For even
in space and duration, when the mind pursues the idea
of infinity, it there makes use of the ideas and repeti-
tions of numbers, as of millions and millions of miles,
or years, which are so many distinct ideas, kept best by
number from running into a confused heap, wherein the
mind loses itself; and when it has added together as
many millions, &c. as it pleases of known lengths of
space or duration, the clearest idea it can get of infinity,
is the confused incomprehensible remainder of endless
addible numbers, which affords no prospect of stop or
boundary.

Our differ- § 10. It will, perhaps, give us a little far-
ent concep- ther light into the idea we have of infinity,
tion of the and discover to us that it is nothing but the
infinity of infinity of number applied to determinate
number, du- parts, of which we have in our minds the
ration, and distinct ideas, if we consider, that number is
expansion. not generally thought by us infinite, whereas
duration and extension are apt to be so; which arises
from hence, that in number we are at one end as it
were: for there being in number nothing less than an
unit, we there stop, and are at an end; but in addition
or increase of number, we can set no bounds. And
so it is like a line, whereof one end terminating with
us, the other is extended still forwards beyond all that
we can conceive; but in space and duration it is other-
wise. For in duration we consider it, as if this line
of number were extended both ways to an unconceiv-
able, undeterminate, and infinite length; which is
evident to any one that will but reflect on what consi-
deration he hath of eternity; which, I suppose, he will
find to be nothing else, but the turning this infinity of

number both ways, *à parte ante* and *à parte post*, as they speak. For when we would consider eternity, *à parte ante*, what do we but, beginning from ourselves and the present time we are in, repeat in our minds the ideas of years, or ages, or any other assignable portion of duration past, with a prospect of proceeding in such addition with all the infinity of number? and when we would consider eternity, *à parte post*, we just after the same rate begin from ourselves, and reckon by multiplied periods yet to come, still extending that line of number as before. And these two being put together, are that infinite duration we call eternity: which, as we turn our view either way, forwards or backwards, appears infinite, because we still turn that way the infinite end of number, i. e. the power still of adding more.

§ 11. The same happens also in space, wherein conceiving ourselves to be as it were in the centre, we do on all sides pursue those indeterminable lines of number; and reckoning any way from ourselves, a yard, mile, diameter of the earth or orbis magnus, by the infinity of number, we add others to them as often as we will; and having no more reason to set bounds to those repeated ideas than we have to set bounds to number, we have that indeterminable idea of immensity.

§ 12. And since in any bulk of matter Infinite divisibility, therefore there is an apparent *visibility*. infinity to us also in that, which has the infinity also of number; but with this difference, that, in the former considerations of the infinity of space and duration, we only use addition of numbers; whereas this is like the division of an unit into its fractions, wherein the mind also can proceed in infinitum, as well as in the former additions; it being indeed but the addition still of new numbers: Though in the addition of the one we can have no more the positive idea of a space infinitely great, than, in the division of the other, we can have the idea of a body infinitely little; our idea of infinity being, as I may say, a growing or fugitive idea, still in a boundless progression, that can stop nowhere.

No positive
idea of infi-
nity.

§ 13. Though it be hard, I think, to find any one so absurd as to say, he has the positive idea of an actual infinite number; the infinity whereof lies only in a power still of adding any combination of units to any former number, and that as long and as much as one will; the like also being in the infinity of space and duration, which power leaves always to the mind room for endless additions; yet there be those who imagine they have positive ideas of infinite duration and space. It would, I think, be enough to destroy any such positive idea of infinite, to ask him that has it, whether he could add to it or no; which would easily show the mistake of such a positive idea. We can, I think, have no positive idea of any space or duration which is not made up, and commensurate to repeated numbers of feet or yards, or days and years, which are the common measures, whereof we have the ideas in our minds, and whereby we judge of the greatness of this sort of quantities. And therefore, since an infinite idea of space or duration must needs be made up of infinite parts, it can have no other infinity than that of number, capable still of farther addition: but not an actual positive idea of a number infinite. For, I think, it is evident that the addition of finite things together (as are all lengths, whereof we have the positive ideas) can never otherwise produce the idea of infinite, than as number does; which consisting of additions of finite units one to another, suggests the idea of infinite, only by a power we find we have of still increasing the sum, and adding more of the same kind, without coming one jot nearer the end of such progression.

§ 14. They who would prove their idea of infinite to be positive, seem to me to do it by a pleasant argument, taken from the negation of an end; which being negative, the negation of it is positive. He that considers that the end is, in body, but the extremity or superficies of that body, will not perhaps be forward to grant that the end is a bare negative: and he that perceives the end of his pen is black or white, will be apt to think that the end is something more than a pure

negation. Nor is it, when applied to duration, the bare negation of existence, but more properly the last moment of it. But if they will have the end to be nothing but the bare negation of existence, I am sure they cannot deny but the beginning is the first instant of being, and is not by any body conceived to be a bare negation; and therefore by their own argument, the idea of eternal, à parte ante, or of a duration without a beginning, is but a negative idea.

§ 15. The idea of infinite has, I confess, something of positive in all those things we apply to it. When we would think of infinite space or duration, we at first step usually make some very large idea, as perhaps of millions of ages, or miles, which possibly we double and multiply several times. All that we thus amass together in our thoughts is positive, and the assemblage of a great number of positive ideas of space or duration. But what still remains beyond this, we have no more a positive distinct notion of, than a mariner has of the depth of the sea; where having let down a large portion of his sounding line, he reaches no bottom; whereby he knows the depth to be so many fathoms, and more; but how much the more is, he hath no distinct notion at all: And could he always supply new line, and find the plummet always sink, without ever stopping, he would be something in the posture of the mind reaching after a complete and positive idea of infinity. In which case let this line be ten, or one thousand fathoms long, it equally discovers what is beyond it; and gives only this confused and comparative idea, that this is not all, but one may yet go farther. So much as the mind comprehends of any space, it has a positive idea of; but in endeavouring to make it infinite, it being always enlarging, always advancing, the idea is still imperfect and incomplete. So much space as the mind takes a view of in its contemplation of greatness, is a clear picture, and positive in the understanding: but infinite is still greater. 1. Then the idea of so much is positive and clear. 2. The idea of greater is also clear, but it is

What is positive, what negative, in our idea of infinite.

but a comparative idea, viz. the idea of so much greater as cannot be comprehended ; and this is plainly negative, not positive. For he has no positive clear idea of the largeness of any extension, (which is that sought for in the idea of infinite) that has not a comprehensive idea of the dimensions of it ; and such nobody, I think, pretends to in what is infinite. For to say a man has a positive clear idea of any quantity, without knowing how great it is, is as reasonable as to say, he has the positive clear idea of the number of the sands on the sea-shore, who knows not how many there be ; but only that they are more than twenty. For just such a perfect and positive idea has he of an infinite space or duration, who says it is larger than the extent or duration of ten, one hundred, one thousand, or any other number of miles, or years, whereof he has, or can have a positive idea ; which is all the idea, I think, we have of infinite. So that what lies beyond our positive idea towards infinity, lies in obscurity ; and has the indeterminate confusion of a negative idea, wherein I know I neither do nor can comprehend all I would, it being too large for a finite and narrow capacity : and that cannot but be very far from a positive complete idea, wherein the greatest part of what I would comprehend is left out, under the undeterminate intimation of being still greater : for to say, that having in any quantity measured so much, or gone so far, you are not yet at the end ; is only to say, that that quantity is greater. So that the negation of an end in any quantity is, in other words, only to say, that it is bigger : and a total negation of an end is but carrying this bigger still with you, in all the progressions your thoughts shall make in quantity ; and adding this idea of still greater, to all the ideas you have, or can be supposed to have, of quantity. Now whether such an idea as that be positive, I leave any one to consider.

We have no positive idea of an infinite duration. § 16. I ask those who say they have a positive idea of eternity, whether their idea of duration includes in it succession, or not ? if it does not, they ought to show the difference of their notion of duration, when ap-

plied to an eternal being, and to a finite: since perhaps, there may be others, as well as I, who will own to them their weakness of understanding in this point; and acknowledge, that the notion they have of duration forces them to conceive, that whatever has duration, is of a longer continuance to-day than it was yesterday. If, to avoid succession in external existence, they return to the punctum stans of the schools, I suppose they will thereby very little mend the matter, or help us to a more clear and positive idea of infinite duration, there being nothing more inconceivable to me than duration without succession. Besides, that punctum stans, if it signify any thing, being not quantum, finite or infinite cannot belong to it. But if our weak apprehensions cannot separate succession from any duration whatsoever, our idea of eternity can be nothing but of infinite succession of moments of duration, wherein any thing does exist; and whether any one has or can have a positive idea of an actual infinite number, I leave him to consider, till his infinite number be so great that he himself can add no more to it; and as long as he can increase it, I doubt he himself will think the idea he hath of it a little too scanty for positive infinity.

§ 17. I think it unavoidable for every considering rational creature, that will but examine his own or any other existence, to have the notion of an eternal wise Being, who had no beginning: and such an idea of infinite duration I am sure I have. But this negation of a beginning being but the negation of a positive thing, scarce gives me a positive idea of infinity; which whenever I endeavoured to extend my thoughts to, I confess myself at a loss, and I find I cannot attain any clear comprehension of it.

§ 18. He that thinks he has a positive idea of infinite space, will, when he considers it, find that he can no more have a positive idea of the greatest, than he has of the least space. For in this latter, which seems the easier of the two, and more within our comprehension,

No positive
idea of infi-
nite space.

we are capable only of a comparative idea of smallness, which will always be less than any one whereof we have the positive idea. All our positive ideas of any quantity, whether great or little, have always bounds; though our comparative idea, whereby we can always add to the one, and take from the other, hath no bounds: for that which remains either great or little, not being comprehended in that positive idea which we have, lies in obscurity; and we have no other idea of it, but of the power of enlarging the one, and diminishing the other, without ceasing. A pestle and mortar will as soon bring any particle of matter to indivisibility, as the acutest thought of a mathematician; and a surveyor may as soon with his chain measure our infinite space, as a philosopher by the quickest flight of mind reach it, or by thinking comprehend it; which is to have a positive idea of it. He that thinks on a cube of an inch diameter, has a clear and positive idea of it in his mind, and so can frame one of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$, and so on till he has the idea in his thoughts of something very little: but yet reaches not the idea of that incomprehensible littleness which division can produce. What remains of smallness, is as far from his thoughts as when he first began; and therefore he never comes at all to have a clear and positive idea of that smallness, which is consequent to infinite divisibility.

What is positive, what negative, in our idea of infinite. § 19. Every one that looks towards infinity does, as I have said, at first glance make some very large idea of that which he applies it to, let it be space or duration; and possibly he wearies his thoughts, by multiplying in his mind that first large idea: but yet by that he comes no nearer to the having a positive clear idea of what remains to make up a positive infinite, than the country-fellow had of the water, which was yet to come and pass the channel of the river where he stood:

Rusticus expectat dum transeat amnis, at ille
Labitur, & labetur in omne volubilis ævum.

§ 20. There are some I have met with that put so much difference between infinite duration and infinite space that they persuade themselves that they have a positive idea of eternity; but that they have not, nor can have any idea of infinite space.

Some think they have a positive idea of eternity, and not of infinite space.

The reason of which mistake I suppose to be this, that finding by a due contemplation of causes and effects, that it is necessary to admit some eternal being, and so to consider the real existence of that being, as taken up and commensurate to their idea of eternity; hut on the other side, not finding it necessary, but on the contrary apparently absurd, that body should be infinite; they forwardly conclude, that they have no idea of infinite space, because they can have no idea of infinite matter. Which consequence, I conceive, is very ill collected; because the existence of matter is no ways necessary to the existence of space, no more than the existence of motion, or the sun, is necessary to duration, though duration uses to be measured by it: and I doubt not but that a man may have the idea of ten thousand miles square, without any body so big, as well as the idea of ten thousand years, without any body so old. It seems as easy to me to have the idea of space empty of body, as to think of the capacity of a bushel without corn, or the hollow of a nut-shell without a kernel in it: it being no more necessary that there should be existing a solid body infinitely extended, because we have an idea of the infinity of space, than it is necessary that the world should be eternal, because we have an idea of infinite duration. And why should we think our idea of infinite space requires the real existence of matter to support it, when we find that we have as clear an idea of an infinite duration to come, as we have of infinite duration past? Though, I suppose nobody thinks it conceivable, that any thing does, or has existed in that future duration. Nor is it possible to join our idea of future duration with present or past existence, any more than it is possible to make the ideas of yesterday, to-day, and to-morrow, to be the same; or bring ages past and future together, and make them

contemporary. But if these men are of the mind, that they have clearer ideas of infinite duration than of infinite space, because it is past doubt that God has existed from all eternity, but there is no real matter co-extended with infinite space; yet those philosophers who are of opinion, that infinite space is possessed by God's infinite omnipresence, as well as infinite duration by his eternal existence, must be allowed to have as clear an idea of infinite space as of infinite duration; though neither of them, I think, has any positive idea of infinity in either case. For whatsoever positive idea a man has in his mind of any quantity, he can repeat it, and add it to the former as easy as he can add together the ideas of two days, or two paces, which are positive ideas of lengths he has in his mind, and so on as long as he pleases: whereby if a man had a positive idea of infinite, either duration or space, he could add two infinites together; nay, make one infinite infinitely bigger than another: absurdities too gross to be confuted.

§ 21. But yet after all this, there being
 Supposed positive ideas of infinity, cause of mistakes. men who persuade themselves that they have clear positive comprehensive ideas of infinity, it is fit they enjoy their privilege: and I should be very glad (with some others that I know, who acknowledge they have none such) to be better informed by their communication. For I have been hitherto apt to think that the great and inextricable difficulties which perpetually involve all discourses concerning infinity, whether of space, duration, or divisibility, have been the certain marks of a defect in our ideas of infinity, and the disproportion the nature thereof has to the comprehension of our narrow capacities. For whilst men talk and dispute of infinite space or duration, as if they had as complete and positive ideas of them, as they have of the names they use for them, or as they have of a yard, or an hour, or any other determinate quantity; it is no wonder if the incomprehensible nature of the thing they discourse of, or reason about, leads them into perplexities and contradictions: and their minds be overlaid by an ob-

ject too large and mighty to be surveyed and managed by them.

§ 22. If I have dwelt pretty long on the consideration of duration, space, and number, and what arises from the contemplation of them, infinity; it is possibly no more than the matter requires, there being few simple ideas, whose modes give more exercise to the thoughts of men than these do. I pretend not to treat of them in their full latitude; it suffices to my design to show how the mind receives them, such as they are, from sensation and reflection; and how even the idea we have of infinity, how remote soever it may seem to be from any object of sense, or operation of our mind, has nevertheless, as all our other ideas, its original there. Some mathematicians perhaps of advanced speculations, may have other ways to introduce into their minds ideas of infinity; but this hinders not, but that they themselves, as well as all other men, got the first ideas which they had of infinity, from sensation and reflection, in the method we have here set down.

All these ideas from sensation and reflection.

CHAP. XVIII.

Of other Simple Modes.

§ 1. **THOUGH** I have in the foregoing chapters shown how from simple ideas, taken in by sensation, the mind comes to extend itself even to infinity; which however it may, of all others, seem most remote from any sensible perception, yet at last hath nothing in it but what is made out of simple ideas, received into the mind by the senses, and afterwards there put together by the faculty the mind has to repeat its own ideas: though, I say, these might be instances enough of simple modes of the simple ideas of sensation, and suffice to show how the mind comes by them; yet I shall for method's sake,

Modes of motion.

though briefly, give an account of some few more, and then proceed to more complex ideas.

§ 2. To slide, roll, tumble, walk, creep, run, dance, leap, skip, and abundance of others that might be named, are words which are no sooner heard, but every one who understands English, has presently in his mind distinct ideas, which are all but the different modifications of motion. Modes of motion answer those of extension: swift and slow are two different ideas of motion, the measures whereof are made of the distances of time and space put together; so they are complex ideas comprehending time and space with motion.

Modes of sounds. § 3. The like variety have we in sounds.

Every articulate word is a different modification of sound: by which we see, that from the sense of hearing, by such modifications the mind may be furnished with distinct ideas to almost an infinite number. Sounds also, besides the distinct cries of birds and beasts, are modified by diversity of notes of different length put together, which make that complex idea called a tune, which a musician may have in his mind when he hears or makes no sound at all, by reflecting on the ideas of those sounds, so put together silently in his own fancy.

Modes of colours. § 4. Those of colours are also very various:

some we take notice of as the different degrees, or, as they are termed, shades of the same colour. But since we very seldom make assemblages of colours either for use or delight, but figure is taken in also and has its part in it, as in painting, weaving, needle-works, &c. those which are taken notice of do most commonly belong to mixed modes, as being made up of ideas of divers kinds, viz. figure and colour, such as beauty, rainbow, &c.

Modes of taste. § 5. All compounded tastes and smells

are also modes made up of the simple ideas of those senses. But they being such as generally we have no names for, are less taken notice of, and cannot be set down in writing: and therefore must be left without enumeration to the thoughts and experience of my reader.

§ 6. In general, it may be observed that those simple modes which are considered but as different degrees of the same simple idea, though they are in themselves many of them very distinct ideas, yet have ordinarily no distinct names, nor are much taken notice of as distinct ideas, where the difference is but very small between them. Whether men have neglected these modes, and given no names to them, as wanting measures nicely to distinguish them; or because, when they were so distinguished, that knowledge would not be of general or necessary use; I leave it to the thoughts of others: it is sufficient to my purpose to show, that all our simple ideas come to our minds only by sensation and reflection; and that when the mind has them, it can variously repeat and compound them, and so make new complex ideas. But though white, red, or sweet, &c. have not been modified or made into complex ideas, by several combinations, so as to be named, and thereby ranked into species; yet some others of the simple ideas, viz. those of unity, duration, motion, &c. above instanced in, as also power and thinking, have been thus modified to a great variety of complex ideas, with names belonging to them.

§ 7. The reason whereof, I suppose, has been this, that, the great concernment of men being with men one amongst another, the knowledge of men and their actions, and the signifying of them to one another, was most necessary; and therefore they made ideas of actions very nicely modified, and gave those complex ideas names, that they might the more easily record, and discourse of those things they were daily conversant in, without long ambages and circumlocutions; and that the things they were continually to give and receive information about, might be the easier and quicker understood. That this is so, and that men in framing different complex ideas, and giving them names, have been much governed by the end of speech in general (which is a very short and expedite way of conveying their thoughts one to another) is evident in

Some simple
modes have
no names.

Why some
modes have,
and others
have not,
names.

the names, which in several arts have been found out, and applied to several complex ideas of modified actions belonging to their several trades, for dispatch sake, in their direction or discourses about them. Which ideas are not generally framed in the minds of men not conversant about these operations. And thence the words that stand for them, by the greatest part of men of the same language, are not understood: v. g. colshire, drilling, filtration, cohobation, are words standing for certain complex ideas, which being seldom in the minds of any but those few whose particular employments do at every turn suggest them to their thoughts, those names of them are not generally understood but by smiths and chymists; who having framed the complex ideas which these words stand for, and having given names to them, or received them from others, upon hearing of these names in communication, readily conceive those ideas in their minds; as by cohobation all the simple ideas of distilling, and the pouring the liquor distilled from any thing, back upon the remaining matter, and distilling it again. Thus we see that there are great varieties of simple ideas, as of tastes and smells, which have no names; and of modes many more. Which either not having been generally enough observed, or else not being of any great use to be taken notice of in the affairs and converse of men, they have not had names given to them, and so pass not for species. This we shall have occasion hereafter to consider more at large, when we come to speak of words.

CHAP. XIX.

Of the Modes of Thinking.

Sensation,
remem-
brance, con-
templation,
&c.

§ 1. WHEN the mind turns its view inwards upon itself, and contemplates its own actions, thinking is the first that occurs. In it the mind observes a

great variety of modifications, and from thence receives distinct ideas. Thus the perception which actually accompanies, and is annexed to any impression on the body, made by an external object, being distinct from all other modifications of thinking, furnishes the mind with a distinct idea, which we call sensation; which is, as it were, the actual entrance of any idea into the understanding by the senses. The same idea, when it again recurs without the operation of the like object on the external sensory, is remembrance; if it be sought after by the mind, and with pain and endeavour found, and brought again in view, it is recollection; if it be held there long under attentive consideration, it is contemplation. When ideas float in our mind, without any reflection or regard of the understanding, it is that which the French call *reverie*, our language has scarce a name for it. When the ideas that offer themselves (for, as I have observed in another place, whilst we are awake, there will always be a train of ideas succeeding one another in our minds) are taken notice of, and, as it were, registered in the memory, it is attention. When the mind with great earnestness, and of choice, fixes its view on any idea, considers it on all sides, and will not be called off by the ordinary solicitation of other ideas, it is that we call intention, or study. Sleep, without dreaming, is rest from all these: and dreaming itself, is the having of ideas (whilst the outward senses are stopped, so that they receive not outward objects with their usual quickness) in the mind, not suggested by any external objects, or known occasion, nor under any choice or conduct of the understanding at all. And whether that, which we call *extasy*, be not dreaming with the eyes open, I leave to be examined.

§ 2. These are some few instances of those various modes of thinking, which the mind may observe in itself, and so have as distinct ideas of, as it hath of white and red, a square or a circle. I do not pretend to enumerate them all, nor to treat at large of this set of ideas, which are got from reflection: that would be to make a volume. It suffices to my present purpose

to have shown here, by some few examples, of what sort these ideas are, and how the mind comes by them; especially since I shall have occasion hereafter to treat more at large of reasoning, judging, volition, and knowledge, which are some of the most considerable operations of the mind, and modes of thinking.

§ 3. But perhaps it may not be an unpardonable digression, nor wholly impertinent to our present design, if we reflect here upon the different state of the mind in thinking, which those instances of attention, reverie, and dreaming, &c. before-mentioned, naturally enough suggest. That there are ideas, some or other, always present in the mind of a waking man, every one's experience convinces him, though the mind employs itself about them with several degrees of attention. Sometimes the mind fixes itself with so much earnestness on the contemplation of some objects, that it turns their ideas on all sides, remarks their relations and circumstances, and views every part so nicely, and with such intention, that it shuts out all other thoughts, and takes no notice of the ordinary impressions made then on the senses, which at another season would produce very sensible perceptions: at other times it barely observes the train of ideas that succeed in the understanding, without directing and pursuing any of them: and at other times it lets them pass almost quite unregarded, as faint shadows that make no impression.

Hence it is probable that thinking is the action, not essence of the soul. § 4. This difference of intention, and remission of the mind in thinking, with a great variety of degrees between earnest study, and very near minding nothing at all, every one, I think, has experimented in himself. Trace it a little farther, and you find the mind in sleep retired as it were from the senses, and out of the reach of those motions made on the organs of sense, which at other times produce very vivid and sensible ideas. I need not for this, instance in those who sleep out whole stormy nights, without hearing the thunder, or seeing the lightning, or feeling the shaking of the house, which are sensible enough to

those who are waking; but in this retirement of the mind from the senses, it often retains a yet more loose and incoherent manner of thinking, which we call dreaming: and, last of all, sound sleep closes the scene quite, and puts an end to all appearances. This, I think, almost every one has experience of in himself, and his own observation without difficulty leads him thus far. That which I would farther conclude from hence, is, that since the mind can sensibly put on, at several times, several degrees of thinking, and be sometimes even in a waking man so remiss, as to have thoughts dim and obscure to that degree, that they are very little removed from none at all; and at last, in the dark retirements of sound sleep, loses the sight perfectly of all ideas whatsoever: since, I say, this is evidently so in matter of fact, and constant experience, I ask whether it be not probable that thinking is the action, and not the essence of the soul? since the operations of agents will easily admit of intention and remission, but the essences of things are not conceived capable of any such variation. But this by the by.

CHAP. XX.

Of Modes of Pleasure and Pain.

§ 1. AMONGST the simple ideas, which we receive both from sensation and reflection, pain and pleasure are two very considerable ones. For as in the body there is sensation barely in itself, or accompanied with pain or pleasure: so the thought or perception of the mind is simply so, or else accompanied also with pleasure or pain, delight or trouble, call it how you please. These, like other simple ideas, cannot be described, nor their names defined; the way of knowing them is, as of the simple ideas of the senses, only by experience. For to define them by the presence of good or evil, is no otherwise to make them known to us, than

by making us reflect on what we feel in ourselves, upon the several and various operations of good and evil upon our minds, as they are differently applied to or considered by us.

Good and evil, what. § 2. Things then are good or evil, only in reference to pleasure or pain. That we call good, which is apt to cause or increase pleasure, or diminish pain in us; or else to procure or preserve us the possession of any other good, or absence of any evil. And on the contrary, we name that evil, which is apt to produce or increase any pain, or diminish any pleasure in us; or else to procure us any evil, or deprive us of any good. By pleasure and pain, I must be understood to mean of body or mind, as they are commonly distinguished; though in truth they be only different constitutions of the mind, sometimes occasioned by disorder in the body, sometimes by thoughts of the mind.

Our passions moved by good and evil. § 3. Pleasure and pain, and that which causes them, good and evil, are the hinges on which our passions turn: and if we reflect on ourselves, and observe how these, under various considerations, operate in us; what modifications or tempers of mind, what internal sensations (if I may so call them) they produce in us, we may thence form to ourselves the ideas of our passions.

Love, § 4. Thus any one reflecting upon the thought he has of the delight, which any present or absent thing is apt to produce in him, has the idea we call love. For when a man declares in autumn, when he is eating them, or in spring, when there are none, that he loves grapes, it is no more but that the taste of grapes delights him; let an alteration of health or constitution destroy the delight of their taste, and he then can be said to love grapes no longer.

Hatred. § 5. On the contrary, the thought of the pain, which any thing present or absent is apt to produce in us, is what we call hatred. Were it my business here to inquire any farther than into the bare ideas of our passions, as they depend on different modifications of pleasure and pain, I should remark,

that our love and hatred of inanimate insensible beings, is commonly founded on that pleasure and pain which we receive from their use and application any way to our senses, though with their destruction : but hatred or love, to beings capable of happiness or misery, is often the uneasiness or delight, which we find in ourselves arising from a consideration of their very being or happiness. Thus the being and welfare of a man's children or friends, producing constant delight in him, he is said constantly to love them. But it suffices to note, that our ideas of love and hatred are but the dispositions of the mind, in respect of pleasure and pain in general, however caused in us.

§ 6. The uneasiness a man finds in him- Desire. self upon the absence of any thing, whose present enjoyment carries the idea of delight with it, is that we call desire ; which is greater or less, as that uneasiness is more or less vehement. Where, by the by, it may perhaps be of some use to remark, that the chief, if not only spur to human industry and action, is uneasiness. For whatsoever good is proposed, if its absence carries no displeasure or pain with it, if a man be easy and content without it, there is no desire of it, nor endeavour after it ; there is no more but a bare velleity, the term used to signify the lowest degree of desire, and that which is next to none at all, when there is so little uneasiness in the absence of any thing, that it carries a man no farther than some faint wishes for it, without any more effectual or vigorous use of the means to attain it. Desire also is stopped or abated by the opinion of the impossibility or unattainableness of the good proposed, as far as the uneasiness is cured or allayed by that consideration. This might carry our thoughts farther, were it seasonable in this place.

§ 7. Joy is a delight of the mind, from Joy. the consideration of the present or assured approaching possession of a good : and we are then possessed of any good when we have it so in our power, that we can use it when we please. Thus a man almost starved has joy at the arrival of relief, even before he has the pleasure of using it : and a father, in whom the

very well-being of his children causes delight, is always, as long as his children are in such a state, in the possession of that good; for he needs but to reflect on it, to have that pleasure.

Sorrow. § 8. Sorrow is uneasiness in the mind, upon the thought of a good lost, which might have been enjoyed longer; or the sense of a present evil.

Hope. § 9. Hope is that pleasure in the mind, which every one finds in himself, upon the thought of a profitable future enjoyment of a thing, which is apt to delight him.

Fear. § 10. Fear is an uneasiness of the mind, upon the thought of future evil likely to befall us.

Despair. § 11. Despair is the thought of the unattainableness of any good, which works differently in men's minds, sometimes producing uneasiness or pain, sometimes rest and indolency.

Anger. § 12. Anger is uneasiness or discomposure of the mind, upon the receipt of any injury, with a present purpose of revenge.

Envy. § 13. Envy is an uneasiness of the mind, caused by the consideration of a good we desire, obtained by one we think should not have had it before us.

What passions all men have. § 14. These two last, envy and anger, not being caused by pain and pleasure, simply in themselves, but having in them some mixed considerations of ourselves and others, are not therefore to be found in all men, because those other parts of valuing their merits, or intending revenge, is wanting in them; but all the rest terminating purely in pain and pleasure, are, I think, to be found in all men. For we love, desire, rejoice, and hope, only in respect of pleasure; we hate, fear, and grieve, only in respect of pain ultimately: in fine, all these passions are moved by things, only as they appear to be the causes of pleasure and pain, or to have pleasure or pain some way or other annexed to them. Thus we extend our hatred usually to the subject (at least if a sensible or

voluntary agent) which has produced pain in us, because the fear it leaves is a constant pain: but we do not so constantly love what has done us good; because pleasure operates not so strongly on us as pain, and because we are not so ready to have hope it will do so again. But this by the by.

§ 15. By pleasure and pain, delight and uneasiness, I must all along be understood (as I have above intimated) to mean not only bodily pain and pleasure, but whatsoever delight or uneasiness is felt by us, whether arising from any grateful or unacceptable sensation or reflection.

§ 16. It is farther to be considered, that in reference to the passions, the removal or lessening of a pain is considered, and operates as a pleasure: and the loss or diminishing of a pleasure, as a pain.

§ 17. The passions too have most of them in most persons operations on the body, and cause various changes in it; which not being always sensible, do not make a necessary part of the idea of each passion. For shame, which is an uneasiness of the mind upon the thought of having done something which is indecent, or will lessen the valued esteem which others have for us, has not always blushing accompanying it.

§ 18. I would not be mistaken here, as if I meant this as a discourse of the passions; they are many more than those I have here named: and those I have taken notice of would each of them require a much larger, and more accurate discourse. I have only mentioned these here as so many instances of modes of pleasure and pain resulting in our minds from various considerations of good and evil. I might perhaps have instanced in other modes of pleasure and pain more simple than these, as the pain of hunger and thirst, and the pleasure of eating and drinking to remove them: the pain of tender eyes, and the pleasure of musick; pain from captious uninstrucive wrangling, and the pleasure of rational conversation with a friend, or of well-directed study in the search and discovery of truth.

But the passions being of much more concernment to us, I rather made choice to instance in them, and show how the ideas we have of them are derived from sensation and reflection.

CHAP. XXI.

Of Power.

This idea
how got.

§ 1. THE mind being every day informed, by the senses, of the alteration of those simple ideas it observes in things without, and taking notice how one comes to an end, and ceases to be, and another begins to exist which was not before; reflecting also on what passes within himself, and observing a constant change of its ideas, sometimes by the impression of outward objects on the senses, and sometimes by the determination of its own choice; and concluding from what it has so constantly observed to have been, that the like changes will for the future be made in the same things by like agents, and by the like ways; considers in one thing the possibility of having any of its simple ideas changed, and in another the possibility of making that change: and so comes by that idea which we call power. Thus we say, fire has a power to melt gold, i. e. to destroy the consistency of its insensible parts, and consequently its hardness, and make it fluid; and gold has a power to be melted: that the sun has a power to blanch wax, and wax a power to be blanched by the sun, whereby the yellowness is destroyed, and whiteness made to exist in its room. In which, and the like cases, the power we consider is in reference to the change of perceivable ideas: for we cannot observe any alteration to be made in, or operation upon, any thing, but by the observable change of its sensible ideas; nor conceive any alteration to be made, but by conceiving a change of some of its ideas.

§ 2. Power, thus considered, is two-fold, Power active and passive. viz. as able to make, or able to receive, any change: the one may be called active, and the other passive power. Whether matter be not wholly destitute of active power, as its author God is truly above all passive power; and whether the intermediate state of created spirits be not that alone which is capable of both active and passive power, may be worth consideration. I shall not now enter into that inquiry: my present business being not to search into the original of power, but how we come by the idea of it. But since active powers make so great a part of our complex ideas of natural substances (as we shall see hereafter) and I mention them as such according to common apprehension; yet they being not perhaps so truly active powers, as our hasty thoughts are apt to represent them, I judge it not amiss, by this intimation, to direct our minds to the consideration of God and spirits, for the clearest idea of active powers.

§ 3. I confess power includes in it some Power in-kind of relation, (a relation to action or change) as indeed which of our ideas, of what kind soever, when attentively considered, does not? cludes relation. For our ideas of extension, duration, and number, do they not all contain in them a secret relation of the parts? Figure and motion have something relative in them much more visibly: and sensible qualities, as colours and smells, &c. what are they but the powers of different bodies, in relation to our perception? &c. And if considered in the things themselves, do they not depend on the bulk, figure, texture, and motion of the parts? All which include some kind of relation in them. Our idea therefore of power, I think may well have a place amongst other simple ideas, and be considered as one of them, being one of those that make a principal ingredient in our complex ideas of substances, as we shall hereafter have occasion to observe.

§ 4. We are abundantly furnished with the idea of passive power by almost all sorts of sensible things. In most of them we The clearest idea of active power had from spirit.

cannot avoid observing their sensible qualities, nay, their very substances, to be in a continual flux : and therefore with reason we look on them as liable still to the same change. Nor have we of active power (which is the more proper signification of the word power) fewer instances : since whatever change is observed, the mind must collect a power somewhere able to make that change, as well as a possibility in the thing itself to receive it. But yet, if we will consider it attentively, bodies, by our senses, do not afford us so clear and distinct an idea of active power, as we have from reflection on the operations of our minds. For all power relating to action, and there being but two sorts of action, whereof we have any idea, viz. thinking and motion ; let us consider whence we have the clearest ideas of the powers which produce these actions.

1. Of thinking body affords us no idea at all, it is only from reflection that we have that.
2. Neither have we from body any idea of the beginning of motion. A body at rest affords us no idea of any active power to move ; and when it is set in motion itself, that motion is rather a passion, than an action in it. For when the ball obeys the motion of a billiard stick, it is not any action of the ball, but bare passion : also when by impulse it sets another ball in motion that lay in its way, it only communicates the motion it had received from another, and loses in itself so much as the other received : which gives us but a very obscure idea of an active power moving in body, whilst we observe it only to transfer, but not produce any motion. For it is but a very obscure idea of power, which reaches not the production of the action, but the continuation of the passion. For so is motion in a body impelled by another ; the continuation of the alteration made in it from rest to motion being little more an action, than the continuation of the alteration of its figure by the same blow is an action. The idea of the beginning of motion we have only from reflection on what passes in ourselves, where we find by experience, that barely by willing it, barely by a thought of the mind, we can move the parts of our bodies, which

were before at rest. So that it seems to me, we have from the observation of the operation of bodies by our senses but a very imperfect obscure idea of active power, since they afford us not any idea in themselves of the power to begin any action, either motion or thought. But if, from the impulse bodies are observed to make one upon another, any one thinks he has a clear idea of power, it serves as well to my purpose, sensation being one of those ways whereby the mind comes by its ideas: only I thought it worth while to consider here by the way, whether the mind doth not receive its idea of active power clearer from reflection on its own operations, than it doth from any external sensation.

§ 5. This at least I think evident, that Will and we find in ourselves a power to begin or understand-
 forbear, continue or end several actions of ing two
 our minds, and motions of our bodies, powers.
 barely by a thought or preference of the mind ordering, or, as it were, commanding the doing or not doing such or such a particular action. This power which the mind has thus to order the consideration of any idea, or the forbearing to consider it; or to prefer the motion of any part of the body to its rest, and vice versa, in any particular instance: is that which we call the will. The actual exercise of that power, by directing any particular action, or its forbearance, is that which we call volition or willing. The forbearance, of that action, consequent to such order or command of the mind, is called voluntary. And whatsoever action is performed without such a thought of the mind, is called involuntary. The power of perception is that which we call the understanding. Perception, which we make the act of the understanding, is of three sorts: 1. The perception of ideas in our mind. 2. The perception of the signification of signs. 3. The perception of the connexion or repugnancy, agreement or disagreement, that there is between any of our ideas. All these are attributed to the understanding, or perceptive power, though it be the two latter only that use allows us to say we understand.

Faculty.

§ 6. These powers of the mind, viz. of perceiving and of preferring, are usually called by another name : and the ordinary way of speaking, is, that the understanding and will are two faculties of the mind ; a word proper enough, if it be used as all words should be, so as not to breed any confusion in men's thoughts, by being supposed (as I suspect it has been) to stand for some real beings in the soul that performed those actions of understanding and volition. For when we say the will is the commanding and superior faculty of the soul : that it is, or is not free ; that it determines the inferior faculties ; that it follows the dictates of the understanding, &c. though these, and the like expressions, by those that carefully attend to their own ideas, and conduct their thoughts more by the evidence of things, than the sound of words, may be understood in a clear and distinct sense ; yet I suspect, I say, that this way of speaking of faculties has misled many into a confused notion of so many distinct agents in us, which had their several provinces and authorities, and did command, obey, and perform several actions, as so many distinct beings ; which has been no small occasion of wrangling, obscurity, and uncertainty in questions relating to them.

Whence the
idea of li-
berty and
necessity.

§ 7. Every one I think, finds in himself a power to begin or forbear, continue or put an end to several actions in himself. From the consideration of the extent of this power of the mind over the actions of the man, which every one finds in himself, arise the ideas of liberty and necessity.

Liberty,
what.

§ 8. All the actions that we have any idea of, reducing themselves, as has been said, to these two, viz. thinking and motion ; so far as a man has power to think, or not to think ; to move, or not to move, according to the preference or direction of his own mind ; so far is a man free. Wherever any performance or forbearance are not equally in a man's power ; wherever doing or not doing, will not equally follow upon the preference of his mind directing it : there he is not free, though per-

haps the action may be voluntary. So that the idea of liberty is the idea of a power in any agent to do or forbear any particular action, according to the determination or thought of the mind, whereby either of them is preferred to the other; where either of them is not in the power of the agent to be produced by him according to his volition, there he is not at liberty; that agent is under necessity. So that liberty cannot be where there is no thought, no volition, no will; but there may be thought, there may be will, there may be volition, where there is no liberty. A little consideration of an obvious instance or two may make this clear.

§ 9. A tennis-ball, whether in motion ^{Supposes} by the stroke of a racket, or lying still at ^{the under-} rest, is not by any one taken to be a free ^{standing} agent. If we inquire into the reason, we ^{and will.} shall find it is because we conceive not a tennis-ball to think, and consequently not to have any volition, or preference of motion to rest, or vice versa; and therefore has not liberty, is not a free agent; but all its both motion and rest come under our idea of necessary, and are so called. Likewise a man falling into the water (a bridge breaking under him) has not herein liberty, is not a free agent. For though he has volition, though he prefers his not falling to falling; yet the forbearance of that motion not being in his power, the stop or cessation of that motion follows not upon his volition; and therefore therein he is not free. So a man striking himself, or his friend, by a convulsive motion of his arm, which it is not in his power, by volition or the direction of his mind, to stop, or forbear, nobody thinks he has in this liberty; every one pities him, as acting by necessity and constraint.

§ 10. Again, suppose a man be carried, ^{Belongs not} whilst fast asleep, into a room, where is a ^{to volition.} person he longs to see and speak with; and be there locked fast in, beyond his power to get out; he awakes, and is glad to find himself in so desirable company, which he stays willingly in, i. e. prefers his stay to going away; I ask, Is not this stay voluntary? I think nobody will doubt it; and yet being

locked fast in, it is evident he is not at liberty not to stay, he has not freedom to be gone. So that liberty is not an idea belonging to volition, or preferring; but to the person having the power of doing, or forbearing to do, according as the mind shall choose or direct. Our idea of liberty reaches as far as that power, and no farther. For wherever restraint comes to check that power, or compulsion takes away that indifferency of ability on either side to act, or to forbear acting; there liberty, and our notion of it, presently ceases.

Voluntary
opposed to
involuntary,
not to neces-
sary.

§ 11. We have instances enough, and often more than enough, in our own bodies. A man's heart beats, and the blood circulates, which it is not in his power by any thought or volition to stop; and therefore in respect to these motions, where rest depends not on his choice, nor would follow the determination of his mind, if it should prefer it, he is not a free agent. Convulsive motions agitate his legs, so that though he wills it ever so much, he cannot by any power of his mind stop their motion (as in that odd disease called chorea sancti Viti) but he is perpetually dancing: he is not at liberty in this action, but under as much necessity of moving, as a stone that falls, or a tennis-ball struck with a racket. On the other side, a palsy or the stocks hinder his legs from obeying the determination of his mind, if it would thereby transfer his body to another place. In all these there is want of freedom; though the sitting still even of a paralytic, whilst he prefers it to a removal, is truly voluntary. Voluntary then is not opposed to necessary, but to involuntary. For a man may prefer what he can do, to what he cannot do: the state he is in, to its absence or change, though necessity has made it in itself unalterable.

Liberty,
what.

§ 12. As it is in the motions of the body, so it is in the thoughts of our minds: where any one is such, that we have power to take it up, or lay it by, according to the preference of the mind, there we are at liberty. A waking man being under the necessity of having some ideas constantly in

his mind, is not at liberty to think, or not to think; no more than he is at liberty whether his body shall touch any other or no: but whether he will remove his contemplation from one idea to another, is many times in his choice; and then he is in respect of his ideas as much at liberty, as he is in respect of bodies he rests on; he can at pleasure remove himself from one to another. But yet some ideas to the mind, like some motions to the body, are such as in certain circumstances it cannot avoid, nor obtain their absence by the utmost effort it can use. A man on the rack is not at liberty to lay by the idea of pain, and divert himself with other contemplations; and sometimes a boisterous passion hurries our thoughts as a hurricane does our bodies, without leaving us the liberty of thinking on other things, which we would rather choose. But as soon as the mind regains the power to stop or continue, begin or forbear any of these motions of the body without, or thoughts within, according as it thinks fit to prefer either to the other, we then consider the man as a free agent again.

§ 13. Wherever thought is wholly wanting, or the power to act or forbear according to the direction of thought; there necessity takes place. This in an agent capable of volition, when the beginning or continuation of any action is contrary to that preference of his mind, is called compulsion: when the hindering or stopping any action is contrary to his volition, it is called restraint. Agents that have no thought, no volition, at all, are in every thing necessary agents.

Necessity,
what.

§ 14. If this be so (as I imagine it is) I leave it to be considered whether it may not help to put an end to that long agitated, and I think, unreasonable, because unintelligible question, viz. Whether man's will be free, or no? For if I mistake not, it follows from what I have said, that the question itself is altogether improper; and it is as insignificant to ask whether man's will be free, as to ask whether his sleep be swift, or his virtue square; liberty being as little applicable to the will, as

Liberty belongs not to the will.

swiftness of motion is to sleep, or squareness to virtue. Every one would laugh at the absurdity of such a question, as either of these; because it is obvious, that the modifications of motion belong not to sleep, nor the difference of figure to virtue: and when any one well considers it, I think he will as plainly perceive, that liberty, which is but a power, belongs only to agents, and cannot be an attribute or modification of the will, which is also but a power.

Volition. § 15. Such is the difficulty of explaining and giving clear notions of internal actions by sounds, that I must here warn my reader that ordering, directing, choosing, preferring, &c. which I have made use of, will not distinctly enough express volition, unless he will reflect on what he himself does when he wills. For example, preferring, which seems perhaps best to express the act of volition, does it not precisely. For though a man would prefer flying to walking, yet who can say he ever wills it? Volition, it is plain, is an act of the mind knowingly exerting that dominion it takes itself to have over any part of the man, by employing it in, or withholding it from, any particular action. And what is the will, but the faculty to do this? And is that faculty any thing more in effect than a power, the power of the mind to determine its thought, to the producing, continuing, or stopping any action, as far as it depends on us? For can it be denied, that whatever agent has a power to think on its own actions, and to prefer their doing or omission either to other, has that faculty called will? Will then is nothing but such a power. Liberty, on the other side, is the power a man has to do or forbear doing any particular action, according as its doing or forbearance has the actual preference in the mind; which is the same thing as to say, according as he himself wills it.

Powers be-
longing to
agents.

§ 16. It is plain then, that the will is nothing but one power or ability; and freedom another power or ability: so that to ask, whether the will has freedom, is to ask whether one power has another power, one ability an-

other ability ; a question at first sight too grossly absurd to make a dispute or need an answer. For who is it that sees not that powers belong only to agents, and are attributes only of substances, and not of powers themselves ? So that this way of putting the question, viz. Whether the will be free ? is in effect to ask, Whether the will be a substance, an agent ? or at least to suppose it, since freedom can properly be attributed to nothing else. If freedom can with any propriety of speech be applied to power, or may be attributed to the power that is in a man to produce or forbear producing motion in parts of his body, by choice or preference ; which is that which denominates him free, and is freedom itself. But if any one should ask whether freedom were free, he would be suspected not to understand well what he said ; and he would be thought to deserve Midas's ears, who, knowing that rich was a denomination for the possession of riches, should demand whether riches themselves were rich.

§ 17. However the name faculty, which men have given to this power called the will, and whereby they have been led into a way of talking of the will as acting, may, by an appropriation that disguises its true sense, serve a little to palliate the absurdity ; yet the will in truth signifies nothing but a power, or ability, to prefer or choose : and when the will under the name of a faculty, is considered as it is, barely as an ability to do something, the absurdity in saying it is free, or not free, will easily discover itself. For if it be reasonable to suppose and talk of faculties, as distinct beings that can act (as we do, when we say the will orders, and the will is free) it is fit that we should make a speaking faculty, and a walking faculty, and a dancing faculty, by which those actions are produced, which are but several modes of motion ; as well as we make the will and understanding to be faculties, by which the actions of choosing and perceiving are produced, which are but several modes of thinking ; and we may as properly say, that it is the singing faculty sings, and the dancing faculty dances ; as that the will chooses, or that the understanding conceives ; or as is

usual, that the will directs the understanding, or the understanding obeys, or obeys not the will: it being altogether as proper and intelligible to say, that the power of speaking directs the power of singing, or the power of singing obeys or disobeys the power of speaking.

§ 18. This way of talking, nevertheless, has prevailed, and, as I guess, produced great confusion. For these being all different powers in the mind, or in the man, to do several actions, he exerts them as he thinks fit: but the power to do one action, is not operated on by the power of doing another action. For the power of thinking operates not on the power of choosing, nor the power of choosing on the power of thinking; no more than the power of dancing operates on the power of singing, or the power of singing on the power of dancing; as any one, who reflects on it, will easily perceive: and yet this is it which we say, when we thus speak, that the will operates on the understanding, or the understanding on the will.

§ 19. I grant, that this or that actual thought may be the occasion of volition, or exercising the power a man has to choose: or the actual choice of the mind, the cause of actual thinking on this or that thing: as the actual singing of such a tune, may be the cause of dancing such a dance, and the actual dancing of such a dance the occasion of singing such a tune. But in all these it is not one power that operates on another: but it is the mind that operates and exerts these powers; it is the man that does the action, it is the agent that has power, or is able to do. For powers are relations, not agents: and that which has the power, or not the power to operate, is that alone which is or is not free, and not the power itself. For freedom, or not freedom, can belong to nothing, but what has or has not a power to act.

§ 20. The attributing to faculties that which belonged not to them, has given occasion to this way of talking: but the introducing into discourses concerning the mind, with the name of faculties, a notion of their operating,

Liberty belongs not to the will.

has, I suppose, as little advanced our knowledge in that part of ourselves, as the great use and mention of the like invention of faculties, in the operations of the body, has helped us in the knowledge of physic. Not that I deny there are faculties, both in the body and mind: they both of them have their powers of operating, else neither the one nor the other could operate. For nothing can operate that is not able to operate; and that is not able to operate, that has no power to operate. Nor do I deny, that those words, and the like, are to have their place in the common use of languages, that have made them current. It looks like too much affectation wholly to lay them by: and philosophy itself, though it likes not a gaudy dress, yet when it appears in public, must have so much complacency, as to be clothed in the ordinary fashion and language of the country, so far as it can consist with truth and perspicuity. But the fault has been, that faculties have been spoken of and represented as so many distinct agents. For it being asked, what it was that digested the meat in our stomachs? it was a ready and very satisfactory answer, to say that it was the digestive faculty. What was it that made any thing come out of the body? the expulsive faculty. What moved? the motive faculty. And so in the mind, the intellectual faculty, or the understanding, understood; and the elective faculty, or the will, willed or commanded. This is in short to say, that the ability to digest, digested; and the ability to move, moved; and the ability to understand, understood. For faculty, ability, and power, I think, are but different names of the same things; which ways of speaking, when put into more intelligible words, will, I think, amount to thus much; that digestion is performed by something that is able to digest, motion by something able to move, and understanding by something able to understand. And in truth it would be very strange if it should be otherwise; as strange as it would be for a man to be free without being able to be free.

But to the agent or man. § 21. To return then to the inquiry about liberty, I think the question is not proper, whether the will be free, but whether a man be free. Thus, I think,

* 1. That so far as any one can, by the direction or choice of his mind, preferring the existence of any action to the non-existence of that action, and vice versa, make it to exist or not exist; so far he is free. For if I can, by a thought directing the motion of my finger, make it move when it was at rest, or vice versa; it is evident, that in respect of that I am free: and if I can, by a like thought of my mind, preferring one to the other, produce either words or silence, I am at liberty to speak, or hold my peace; and as far as this power reaches, of acting, or not acting, by the determination of his own thought preferring either, so far is a man free. For how can we think any one freer, than to have the power to do what he will? And so far as any one can, by preferring any action to its not being, or rest to any action, produce that action or rest, so far can he do what he will. For such a preferring of action to its absence, is the willing of it; and we can scarce tell how to imagine any being freer, than to be able to do what he wills. So that in respect of actions within the reach of such a power in him, a man seems as free, as it is possible for freedom to make him.

In respect of willing, a man is not free. § 22. But the inquisitive mind of man, willing to shift off from himself, as far as he can, all thoughts of guilt, though it be by putting himself into a worse state than that of fatal necessity, is not content with this; freedom, unless it reaches farther than this, will not serve the turn: and it passes for a good plea, that a man is not free at all, if he be not as free to will, as he is to, act what he wills. Concerning a man's liberty, there yet therefore is raised this farther question, Whether a man be free to will? which I think is what is meant, when it is disputed whether the will be free. And as to that I imagine,

§ 23. That willing, or volition, being an action, and freedom consisting in a power of acting or not

acting, a man in respect of willing or the act of volition, when any action in his power is once proposed to his thoughts, as presently to be done, cannot be free. The reason whereof is very manifest : for it being unavoidable that the action depending on his will should exist, or not exist : and its existence, or not existence, following perfectly the determination and preference of his will ; he cannot avoid willing the existence, or not existence of that action ; it is absolutely necessary that he will the one, or the other ; i. e. prefer the one to the other ; since one of them must necessarily follow ; and that which does follow, follows by the choice and determination of his mind, that is, by his willing it ; for if he did not will it, it would not be. So that in respect of the act of willing, a man in such a case is not free : liberty consisting in a power to act, or not to act ; which, in regard of volition, a man, upon such a proposal, has not. For it is unavoidably necessary to prefer the doing or forbearance of an action in a man's power, which is once so proposed to his thoughts : a man must necessarily will the one or the other of them, upon which preference or volition, the action or its forbearance certainly follows, and is truly voluntary. But the act of volition, or preferring one of the two, being that which he cannot avoid, a man in respect of that act of willing is under a necessity, and so cannot be free ; unless necessity and freedom can consist together, and a man can be free and bound at once.

§ 24. This then is evident, that in all proposals of present action, a man is not at liberty to will or not to will, because he cannot forbear willing : liberty consisting in a power to act or to forbear acting, and in that only. For a man that sits still is said yet to be at liberty, because he can walk if he wills it. But if a man sitting still has not a power to remove himself, he is not at liberty ; so likewise a man falling down a precipice, though in motion, is not at liberty, because he cannot stop that motion if he would. This being so, it is plain that a man that is walking, to whom it is proposed to give off walking, is not at liberty whether he will determine himself to walk, or give off walking,

or no : he must necessarily prefer one or the other of them, walking or not walking ; and so it is in regard of all other actions in our power so proposed, which are the far greater number. For considering the vast number of voluntary actions that succeed one another every moment that we are awake in the course of our lives, there are but few of them that are thought on or proposed to the will, till the time they are to be done : and in all such actions, as I have shown, the mind in respect of willing has not a power to act, or not to act, wherein consists liberty. The mind in that case has not a power to forbear willing ; it cannot avoid some determination concerning them, let the consideration be as short, the thought as quick as it will ; it either leaves the man in the state he was before thinking, or changes it ; continues the action, or puts an end to it. Whereby it is manifest, that it orders and directs one, in preference to or with neglect of the other, and thereby either the continuation or change becomes unavoidably voluntary.

The will determined by something without it. § 25. Since then it is plain, that in most cases a man is not at liberty, whether he will or no ; the next thing demanded, is, whether a man be at liberty to will which of the two he pleases, motion or rest ? This question carries the absurdity of it so manifestly in itself, that one might thereby sufficiently be convinced that liberty concerns not the will. For to ask, whether a man be at liberty to will either motion or rest, speaking or silence, which he pleases ; is to ask, whether a man can will what he wills, or be pleased with what he is pleased with ? A question which, I think, needs no answer ; and they who can make a question of it, must suppose one will to determine the acts of another, and another to determine that ; and so on in infinitum.

§ 26. To avoid these and the like absurdities, nothing can be of greater use, than to establish in our minds determined ideas of the things under consideration. If the ideas of liberty and volition were well fixed in the understandings, and carried along with us in our minds, as they ought, through all the questions

that are raised about them, I suppose a great part of the difficulties that perplex men's thoughts, and entangle their understandings, would be much easier resolved; and we should perceive where the confused signification of terms, or where the nature of the thing caused the obscurity.

§ 27. First then, it is carefully to be remembered, that freedom consists in the dependence of the existence, or not existence of any action, upon our volition of it; and not in the dependence of any action, or its contrary, on our preference. A man standing on a cliff, is at liberty to leap twenty yards downwards into the sea, not because he has a power to do the contrary action, which is to leap twenty yards upwards, for that he cannot do: but he is therefore free because he has a power to leap or not to leap. But if a greater force than his either holds him fast, or tumbles him down, he is no longer free in that case; because the doing or forbearance of that particular action is no longer in his power. He that is a close prisoner in a room twenty feet square, being at the north side of his chamber, is at liberty to walk twenty feet southward, because he can walk or not walk it; but is not, at the same time, at liberty to do the contrary, i. e. to walk twenty feet northward.

In this then consists freedom, viz. in our being able to act or not to act, according as we shall choose or will.

§ 28. Secondly, we must remember, that volition, volition or willing is an act of the mind ^{what.} directing its thought to the production of any action, and thereby exerting its power to produce it. To avoid multiplying of words, I would crave leave here, under the word action, to comprehend the forbearance too of any action proposed: sitting still, or holding one's peace, when walking or speaking are proposed, though mere forbearances, requiring as much the determination of the will, and being as often weighty in their consequences as the contrary actions, may, on that consideration, well enough pass for actions too: but this I say, that I may not be mistaken, if for brevity sake I speak thus.

What deter-
mines the
will. § 29. Thirdly, The will being nothing but a power in the mind to direct the operative faculties of a man to motion or rest, as far as they depend on such direction: to the question, What is it determines the will? the true and proper answer is, The mind. For that which determines the general power of directing to this or that particular direction, is nothing but the agent itself exercising the power it has, that particular way. If this answer satisfies not, it is plain the meaning of the question, What determines the will? is this, What moves the mind, in every particular instance, to determine its general power of directing to this or that particular motion or rest? And to this I answer, the motive for continuing in the same state or action, is only the present satisfaction in it; the motive to change, is always some uneasiness; nothing setting us upon the change of state, or upon any new action, but some uneasiness. This is the great motive that works on the mind to put it upon action, which for shortness' sake we will call determining of the will; which I shall more at large explain.

Will and
desire must
not be con-
founded. § 30. But, in the way to it, it will be necessary to premise, that though I have above endeavoured to express the act of volition by choosing, preferring, and the like terms, that signify desire as well as volition, for want of other words to mark that act of the mind, whose proper name is willing or volition; yet it being a very simple act, whosoever desires to understand what it is, will better find it by reflecting on his own mind, and observing what it does when it wills, than by any variety of articulate sounds whatsoever. This caution of being careful not to be misled by expressions that do not enough keep up the difference between the will and several acts of the mind that are quite distinct from it, I think the more necessary; because I find the will often confounded with several of the affections, especially desire, and one put for the other; and that by men, who would not willingly be thought not to have had very distinct notions of things, and not to have

writ very clearly about them. This, I imagine, has been no small occasion of obscurity and mistake in this matter ; and therefore is, as much as may be, to be avoided. For he that shall turn his thoughts inwards upon what passes in his mind when he wills, shall see that the will or power of volition is conversant about nothing, but that particular determination of the mind, whereby barely by a thought the mind endeavours to give rise, continuation, or stop, to any action which it takes to be in its power. This well considered, plainly shows that the will is perfectly distinguished from desire ; which in the very same action may have a quite contrary tendency from that which our will sets us upon. A man whom I cannot deny, may oblige me to use persuasions to another, which, at the same time I am speaking, I may wish may not prevail on him. In this case, it is plain the will and desire run counter. I will the action that tends one way, whilst my desire tends another, and that the direct contrary way. A man who by a violent fit of the gout in his limbs finds a dozing in his head, or a want of appetite in his stomach removed, desires to be eased too of the pain of his feet or hands (for wherever there is pain, there is a desire to be rid of it) though yet, whilst he apprehends that the removal of the pain may translate the noxious humour to a more vital part, his will is never determined to any one action that may serve to remove this pain. Whence it is evident that desiring and willing are two distinct acts of the mind ; and consequently that the will, which is but the power of volition, is much more distinct from desire.

§ 31. To return then to the inquiry, What is it that determines the will in regard to our actions? And that, upon second thoughts, I am apt to imagine is not, as is generally supposed, the greater good in view ; but some (and for the most part the most pressing) uneasiness a man is at present under. This is that which successively determines the will, and sets us upon those actions we perform. This uneasiness we may call, as it is, desire ; which is an uneasiness of the mind for want

Uneasiness
determines
the will.

of some absent good. All pain of the body, of what sort soever, and disquiet of the mind, is uneasiness: and with this is always joined desire, equal to the pain or uneasiness felt, and is scarce distinguishable from it. For desire being nothing but an uneasiness in the want of an absent good, in reference to any pain felt, ease is that absent good; and till that ease be attained, we may call it desire, nobody feeling pain that he wishes not to be eased of, with a desire equal to that pain, and inseparable from it. Besides this desire of ease from pain, there is another of absent positive good; and here also the desire and uneasiness are equal. As much as we desire any absent good, so much are we in pain for it. But here all absent good does not, according to the greatness it has, or is acknowledged to have, cause pain equal to that greatness; as all pain causes desire equal to it itself; because the absence of good is not always a pain, as the presence of pain is. And therefore absent good may be looked on, and considered without desire. But so much as there is any where of desire, so much there is of uneasiness.

Desire is
uneasiness. § 32. That desire is a state of uneasiness, every one who reflects on himself will quickly find. Who is there, that has not felt in desire what the wise man says of hope, (which is not much different from it) "that it being deferred makes the heart sick?" and that still proportionable to the greatness of the desire: which sometimes raises the uneasiness to that pitch, that it makes people cry out, Give me children, give me the thing desired, or I die? Life itself, and all its enjoyments, is a burden cannot be born under the lasting and unremoved pressure of such an uneasiness.

The uneasiness of desire determines the will. § 33. Good and evil, present and absent, it is true, work upon the mind; but that which immediately determines the will, from time to time, to every voluntary action, is the uneasiness of desire, fixed on some absent good: either negative, as indolence to one in pain; or positive, as enjoyment of pleasure. That it is this uneasiness that determines the will to the succes-

sive voluntary actions, whereof the greatest part of our lives is made up, and by which we are conducted through different courses to different ends: I shall endeavour to show, both from experience and the reason of the thing.

§ 34. When a man is perfectly content with the state he is in, which is, when he is perfectly without any uneasiness, what industry, what action, what will is there left, but to continue in it? of this every man's observation will satisfy him. And thus we see our All-wise Maker, suitably to our constitution and frame, and knowing what it is that determines the will, has put into man the uneasiness of hunger and thirst, and other natural desires, that return at their seasons, to move and determine their wills, for the preservation of themselves, and the continuation of their species. For I think we may conclude, that if the bare contemplation of these good ends, to which we are carried by these several uneasinesses, had been sufficient to determine the will, and set us on work, we should have had none of these natural pains, and perhaps in this world little or no pain at all. "It is better to marry than to burn," says St. Paul; where we may see what it is that chiefly drives men into the enjoyments of a conjugal life. A little burning felt pushes us more powerfully, than greater pleasures in prospect draw or allure.

§ 35. It seems so established and settled a maxim by the general consent of all mankind, that good, the greater good, determines the will, that I do not at all wonder, that when I first published my thoughts on this subject, I took it for granted; and I imagine that by a great many I shall be thought more excusable, for having then done so, than that now I have ventured to recede from so received an opinion. But yet upon a stricter inquiry, I am forced to conclude, that good, the greater good, though apprehended and acknowledged to be so, does not determine the will, until our desire, raised proportionably to it, makes us uneasy in the want of it. Convince a man ever so much

This is the
spring of
action.

The greatest
positive
good deter-
mines not
the will, but
uneasiness.

that plenty has an advantage over poverty ; make him see and own, that the handsome conveniencies of life are better than nasty penury : yet as long as he is content with the latter, and finds no uneasiness in it, he moves not ; his will never is determined to any action that shall bring him out of it. Let a man be ever so well persuaded of the advantages of virtue, that it is as necessary to a man who has any great aims in this world, or hopes in the next, as food to life : yet, till he hungers or thirsts after righteousness, till he feels an uneasiness in the want of it, his will will not be determined to any action in pursuit of this confessed greater good ; but any other uneasiness he feels in himself shall take place, and carry his will to other actions. On the other side, let a drunkard see that his health decays, his estate wastes ; discredit and diseases, and the want of all things, even of his beloved drink, attends him in the course he follows ; yet the returns of uneasiness to miss his companions, the habitual thirst after his cups, at the usual time, drives him to the tavern, though he has in his view the loss of health and plenty, and perhaps of the joys of another life : the least of which is no inconsiderable good, but such as he confesses is far greater than the tickling of his palate with a glass of wine, or the idle chat of a soaking club. It is not want of viewing the greater good ; for he sees and acknowledges it, and, in the intervals of his drinking hours, will take resolution to pursue the greater good ; but when the uneasiness to miss his accustomed delight returns, the greater acknowledged good loses its hold, and the present uneasiness determines the will to the accustomed action : which thereby gets stronger footing to prevail against the next occasion, though he at the same time makes secret promises to himself, that he will do so no more ; this is the last time he will act against the attainment of those greater goods. And thus he is from time to time in the state of that unhappy complainer, *video meliora proboque, deteriora sequor* : which sentence, allowed for true, and made good by constant experience, may this, and possibly no other way, be easily made intelligible.

§ 36. If we inquire into the reason of what experience makes so evident in fact, and examine why it is uneasiness alone operates on the will, and determines it in its choice; we shall find that we being capable but of one determination of the will to one action at once, the present uneasiness that we are under does naturally determine the will, in order to that happiness which we all aim at in all our actions; forasmuch as whilst we are under any uneasiness, we cannot apprehend ourselves happy, or in the way to it. Pain and uneasiness being, by every one, concluded and felt to be inconsistent with happiness, spoiling the relish even of those good things which we have; a little pain serving to mar all the pleasure we rejoiced in. And therefore that which of course determines the choice of our will to the next action, will always be the removing of pain, as long as we have any left, as the first and necessary step towards happiness.

§ 37. Another reason why it is uneasiness alone determines the will, may be this; because that alone is present, and it is against the nature of things, that what is absent should operate where it is not. It may be said, that absent good may by contemplation be brought home to the mind, and made present. The idea of it indeed may be in the mind, and viewed as present there; but nothing will be in the mind as a present good, able to counter-balance the removal of any uneasiness which we are under, till it raises our desire; and the uneasiness of that has the prevalency in determining the will. Till then, the idea in the mind of whatever good, is there only, like other ideas, the object of bare unactive speculation, but operates not on the will, nor sets us on work; the reason whereof I shall show by and by. How many are to be found, that have had lively representations set before their minds of the unspeakable joys of heaven, which they acknowledge both possible and probable too, who yet would be content to take up with their happiness here? And so the prevailing uneasiness of their desires, let

Because the removal of uneasiness is the first step to happiness.

Because uneasiness alone is present.

loose after the enjoyments of this life, take their turns in the determining their wills ; and all that while they take not one step, are not one jot moved towards the good things of another life, considered as ever so great.

Because all who allow the joys of heaven possible, pursue them not. § 38. Were the will determined by the views of good, as it appears in contemplation greater or less to the understanding, which is the state of all absent good, and that which in the received opinion the will is supposed to move to, and to be moved

by, I do not see how it could ever get loose from the infinite eternal joys of heaven, once proposed and considered as possible. For all absent good, by which alone, barely proposed, and coming in view, the will is thought to be determined, and so to set us on action, being only possible, but not infallibly certain ; it is unavoidable, that the infinitely greater possible good should regularly and constantly determine the will in all the successive actions it directs : and then we should keep constantly and steadily in our course towards heaven, without ever standing still, or directing our actions to any other end. The eternal condition of a future state infinitely outweighing the expectation of riches, or honour, or any other worldly pleasure which we can propose to ourselves, though we should grant these the more probable to be obtained : for nothing future is yet in possession, and so the expectation even of these may deceive us. If it were so, that the greater good in view determines the will, so great a good once proposed could not but seize the will, and hold it fast to the pursuit of this infinitely greatest good, without ever letting it go again : for the will having a power over, and directing the thoughts as well as other actions, would, if it were so, hold the contemplation of the mind fixed to that good.

But any great uneasiness is never neglected. This would be the state of the mind, and regular tendency of the will in all its determinations, were it determined by that which is considered, and in view the greater good ; but that it is not so, is visible in experience :

the infinitely greatest confessed good being often neglected, to satisfy the successive uneasiness of our desires pursuing trifles. But though the greatest allowed, even everlasting unspeakable good, which has sometimes moved and affected the mind, does not stedfastly hold the will, yet we see any very great and prevailing uneasiness, having once laid hold on the will, lets it not go; by which we may be convinced, what it is that determines the will. Thus any vehement pain of the body, the ungovernable passion of a man violently in love, or the impatient desire of revenge, keeps the will steady and intent; and the will, thus determined, never lets the understanding lay by the object, but all the thoughts of the mind and powers of the body are uninterruptedly employed that way, by the determination of the will, influenced by that topping uneasiness as long as it lasts; whereby it seems to me evident, that the will or power of setting us upon one action in preference to all other, is determined in us by uneasiness. And whether this be not so, I desire every one to observe in himself.

§ 39. I have hitherto chiefly instanced in the uneasiness of desire, as that which determines the will; because that is the chief and most sensible, and the will seldom orders any action, nor is there any voluntary action performed, without some desire accompanying it; which I think is the reason why the will and desire are so often confounded. But yet we are not to look upon the uneasiness which makes up, or at least accompanies most of the other passions, as wholly excluded in the case. Aversion, fear, anger, envy, shame, &c. have each their uneasiness too, and thereby influence the will. These passions are scarce any of them in life and practice simple and alone, and wholly unmixed with others: though usually in discourse and contemplation, that carries the name which operates strongest, and appears most in the present state of the mind: nay there is, I think, scarce any of the passions to be found without desire joined with it. I am sure, wherever there is uneasiness, there is desire: for we constantly

Desire accompanies all uneasiness.

desire happiness : and whatever we feel of uneasiness, so much it is certain we want of happiness, even in our own opinion, let our state and condition otherwise be what it will. Besides, the present moment not being our eternity, whatever our enjoyment be, we look beyond the present, and desire goes with our foresight, and that still carries the will with it. So that even in joy itself, that which keeps up the action, whereon the enjoyment depends, is the desire to continue it, and fear to lose it : and whenever a greater uneasiness than that takes place in the mind, the will presently is by that determined to some new action, and the present delight neglected.

The most pressing uneasiness naturally determines the will. § 40. But we being in this world beset with sundry uneasinesses, distracted with different desires, the next inquiry naturally will be, which of them has the precedency in determining the will to the next action?

and to that the answer is, that ordinarily, which is the most pressing of those that are judged capable of being then removed. For the will being the power of directing our operative faculties to some action, for some end, cannot at any time be moved towards what is judged at that time unattainable : that would be to suppose an intelligent being designedly to act for an end, only to lose its labour, for so it is to act for what is judged not attainable ; and therefore very great uneasinesses move not the will, when they are judged not capable of a cure ; they, in that case, put us not upon endeavours. But these set apart, the most important and urgent uneasiness we at that time feel, is that which ordinarily determines the will successively, in that train of voluntary actions which makes up our lives. The greatest present uneasiness is the spur to action, that is constantly felt, and for the most part determines the will in its choice of the next action. For this we must carry along with us, that the proper and only object of the will is some action of ours, and nothing else : for we producing nothing by our willing it, but some action in our power, it is there the will terminates, and reaches no farther.

§ 41. If it be farther asked, what it is All desire moves desire? I answer, Happiness, and happiness. that alone. Happiness and misery are the names of two extremes, the utmost bounds whereof we know not; it is what "eye hath not seen, ear not heard, nor hath it entered into the heart of man to conceive." But of some degrees of both we have very lively impressions, made by several instances of delight and joy on the one side, and torment and sorrow on the other: which for shortness sake I shall comprehend under the names of pleasure and pain, there being pleasure and pain of the mind as well as the body: "with him is fulness of joy and pleasure for evermore." Or, to speak truly, they are all of the mind; though some have their rise in the mind from thought, others in the body from certain modifications of motion.

§ 42. Happiness then in its full extent Happiness, is the utmost pleasure we are capable of, what. and misery the utmost pain: and the lowest degree of what can be called happiness is so much ease from all pain, and so much present pleasure, as without which any one cannot be content. Now because pleasure and pain are produced in us by the operation of certain objects, either on our minds or our bodies, and in different degrees; therefore what has an aptness to produce pleasure in us is that we call good, and what is apt to produce pain in us we call evil, for no other reason, but for its aptness to produce pleasure and pain in us, wherein consists our happiness and misery. Farther, though what is apt to produce any degree of pleasure be in itself good; and what is apt to produce any degree of pain, be evil; yet it often happens, that we do not call it so, when it comes in competition with a greater of its sort; because when they come in competition, the degrees also of pleasure and pain have justly a preference. So that if we will rightly estimate what we call good and evil, we shall find it lies much in comparison; for the cause of every less degree of pain, as well as every greater

degree of pleasure, has the nature of good, and vice versa.

What good is desired, what not. § 43. Though this be that which is called good and evil; and all good be the proper object of desire in general; yet all good, even seen, and confessed to be so, does not necessarily move every particular man's desire, but only that part, or so much of it as is considered and taken to make a necessary part of his happiness. All other good, however great in reality or appearance, excites not a man's desires, who looks not on it to make a part of that happiness, wherewith he, in his present thoughts, can satisfy himself. Happiness, under this view, every one constantly pursues, and desires what makes any part of it: other things, acknowledged to be good, he can look upon without desire, pass by, and be content without. There is nobody, I think, so senseless as to deny, that there is pleasure in knowledge: and for the pleasures of sense, they have too many followers to let it be questioned, whether men are taken with them or no. Now let one man place his satisfaction in sensual pleasures, another in the delight of knowledge; though each of them cannot but confess, there is great pleasure in what the other pursues; yet neither of them making the other's delight a part of his happiness, their desires are not moved, but each is satisfied without what the other enjoys, and so his will is not determined to the pursuit of it. But yet as soon as the studious man's hunger and thirst makes him uneasy, he, whose will was never determined to any pursuit of good cheer, poignant sauces, delicious wine, by the pleasant taste he has found in them, is, by the uneasiness of hunger and thirst, presently determined to eating and drinking, though possibly with great indifferency, what wholesome food comes in his way. And on the other side, the epicure buckles to study when shame, or the desire to recommend himself to his mistress, shall make him uneasy in the want of any sort of knowledge. Thus, how much soever men are in earnest, and constant in pursuit of happiness, yet they may have a clear view of good, great and con-

fessed good, without being concerned for it, or moved by it, if they think they can make up their happiness without it. Though as to pain, that they are always concerned for : they can feel no uneasiness without being moved. And therefore being uneasy in the want of whatever is judged necessary to their happiness, as soon as any good appears to make a part of their portion of happiness, they begin to desire it.

§ 44. This, I think, any one may ob- Why the
serve in himself and others, that the greater ^{greatest}
visible good does not always raise men's ^{good is not}
desires, in proportion to the greatness it ^{always de-}
^{sired.}
appears, and is acknowledged to have : though every
little trouble moves us, and sets us on work to get rid
of it. The reason whereof is evident, from the nature
of our happiness and misery itself. All present pain,
whatever it be, makes a part of our present misery ;
but all absent good does not at any time make a ne-
cessary part of our present happiness, nor the absence
of it make a part of our misery. If it did, we should
be constantly and infinitely miserable ; there being in-
finite degrees of happiness, which are not in our pos-
session. All uneasiness therefore being removed, a
moderate portion of good serves at present to content
men ; and some few degrees of pleasure in a succession
of ordinary enjoyments make up a happiness, wherein
they can be satisfied. If this were not so, there could
be no room for those indifferent and visibly trifling ac-
tions, to which our wills are so often determined, and
wherein we voluntarily waste so much of our lives ;
which remissness could by no means consist with a con-
stant determination of will or desire to the greatest
apparent good. That this is so, I think few people
need go far from home to be convinced. And indeed
in this life there are not many whose happiness reaches
so far as to afford them a constant train of moderate
mean pleasures, without any mixture of uneasiness ;
and yet they could be content to stay here for ever :
though they cannot deny, but that it is possible there
may be a state of eternal durable joys after this life,
far surpassing all the good that is to be found here.

Nay, they cannot but see, that it is more possible than the attainment and continuation of that pittance of honour, riches, or pleasure, which they pursue, and for which they neglect that eternal state; but yet in full view of this difference, satisfied of the possibility of a perfect, secure, and lasting happiness in a future state, and under a clear conviction, that it is not to be had here, whilst they bound their happiness within some little enjoyment, or aim of this life, and exclude the joys of heaven from making any necessary part of it; their desires are not moved by this greater apparent good, nor their wills determined to any action, or endeavour for its attainment.

Why not being desired, § 45. The ordinary necessities of our lives fill a great part of them with the uneasiness of hunger, thirst, heat, cold, weariness, the will.

ness with labour, and sleepiness, in their constant returns, &c. To which, if, besides accidental harms, we add the fantastical uneasiness (as itch after honour, power, or riches, &c.) which acquired habits by fashion, example, and education, have settled in us, and a thousand other irregular desires, which custom has made natural to us; we shall find, that a very little part of our life is so vacant from these uneasinesses, as to leave us free to the attraction of remoter absent good. We are seldom at ease, and free enough from the solicitation of our natural or adopted desires, but a constant succession of uneasinesses out of that stock, which natural wants or acquired habits have heaped up, take the will in their turns: and no sooner is one action dispatched, which by such a determination of the will we are set upon, but another uneasiness is ready to set us on work. For the removing of the pains we feel, and are at present pressed with, being the getting out of misery, and consequently the first thing to be done in order to happiness, absent good, though thought on, confessed, and appearing to be good, not making any part of this unhappiness in its absence, is justled out to make way for the removal of those uneasinesses we feel; till due and repeated contemplation has brought it nearer to our mind, given some relish of it, and

raised in us some desire ; which then beginning to make a part of our present uneasiness, stands upon fair terms with the rest to be satisfied ; and so, according to its greatness and pressure, comes in its turn, to determine the will.

§ 46. And thus, by a due consideration, Due consi- and examining any good proposed, it is in deration our power to raise our desires in a due raises desire. proportion to the value of that good whereby in its turn and place it may come to work upon the will, and be pursued. For good, though appearing, and allowed ever so great, yet till it has raised desires in our minds, and thereby made us uneasy in its want, it reaches not our wills ; we are not within the sphere of its activity ; our wills being under the determination only of those uneasinesses which are present to us, which (whilst we have any) are always soliciting, and ready at hand to give the will its next determination : the balancing, when there is any in the mind, being only which desire shall be next satisfied, which uneasiness first removed. Whereby comes to pass, that as long as any uneasiness, any desire remains in our mind, there is no room for good, barely as such, to come at the will, or at all to determine it. Because, as has been said, the first step in our endeavours after happiness being to get wholly out of the confines of misery, and to feel no part of it, the will can be at leisure for nothing else, till every uneasiness we feel be perfectly removed ; which, in the multitude of wants and desires we are beset with in this imperfect state, we are not like to be ever freed from in this world.

§ 47. There being in us a great many The power uneasinesses always soliciting, and ready to to suspend determine the will, it is natural, as I have the prosecu- said, that the greatest and most pressing tion of any should determine the will to the next action ; desire makes and so it does for the most part, but not way for con- always. For the mind having in most cases, as is evident in experience, a power to suspend the execution and satisfaction of any of its desires, and so all, one after another ; is at liberty to consider the objects of

them, examine them on all sides, and weigh them with others. In this lies the liberty man has; and from the not using of it right comes all that variety of mistakes, errours, and faults which we run into in the conduct of our lives, and our endeavours after happiness; whilst we precipitate the determination of our wills, and engage too soon before due examination. To prevent this, we have a power to suspend the prosecution of this or that desire, as every one daily may experiment in himself. This seems to me the source of all liberty; in this seems to consist that which is (as I think improperly) called free-will. For during this suspension of any desire, before the will be determined to action, and the action (which follows that determination) done, we have opportunity to examine, view, and judge of the good or evil of what we are going to do; and when, upon due examination, we have judged, we have done our duty, all that we can or ought to do in pursuit of our happiness; and it is not a fault, but a perfection of our nature to desire, will, and act according to the last result of a fair examination.

To be de- § 48. This is so far from being a restraint
 termined by or diminution of freedom, that it is the
 our own very improvement and benefit of it: it is
 judgment, not an abridgment, it is the end and use
 is no re- of our liberty; and the farther we are re-
 straint to moved from such a determination, the
 liberty. nearer we are to misery and slavery. A perfect indif-
 ferency in the mind, not determinable by its last judg-
 ment of the good or evil that is thought to attend its
 choice, would be so far from being an advantage and
 excellency of any intellectual nature, that it would be
 as great an imperfection, as the want of indifferency
 to act or not to act till determined by the will, would be
 an imperfection on the other side. A man is at li-
 berty to lift up his hand to his head, or let it rest
 quiet; he is perfectly indifferent in either; and it would
 be an imperfection in him, if he wanted that power, if
 he were deprived of that indifferency. But it would
 be as great an imperfection if he had the same indif-
 ferency, whether he would prefer the lifting up his

hand, or its remaining in rest, when it would save his head or eyes from a blow he sees coming: it is as much a perfection, that desire, or the power of preferring, should be determined by good, as that the power of acting should be determined by the will; and the certainer such determination is, the greater is the perfection. Nay, were we determined by any thing but the last result of our own minds, judging of the good or evil of any action, we were not free: the very end of our freedom being, that we may attain the good we choose. And therefore every man is put under a necessity by its constitution, as an intelligent being, to be determined in willing by his own thought and judgment what is best for him to do: else he would be under the determination of some other than himself, which is want of liberty. And to deny that a man's will, in every determination, follows his own judgment, is to say, that a man wills and acts for an end that he would not have, at the time that he wills and acts for it. For if he prefers it in his present thoughts before any other, it is plain he then thinks better of it, and would have it before any other; unless he can have and not have it, will and not will it, at the same time; a contradiction too manifest to be admitted!

§ 49. If we look upon those superior beings above us, who enjoy perfect happiness, we shall have reason to judge that they are more steadily determined in their choice

The freest agents are so determined.

of good than we; and yet we have no reason to think they are less happy, or less free than we are. And if it were fit for such poor finite creatures as we are to pronounce what infinite wisdom and goodness could do, I think we might say, that God himself cannot choose what is not good; the freedom of the Almighty hinders not his being determined by what is best.

§ 50. But to give a right view of this mistaken part of liberty, let me ask, "Would any one be a changeling, because he is less determined by wise considerations than a wise man? Is it worth the name of freedom to be at liberty to

A constant determination to a pursuit of happiness no abridgment of liberty.

“play the fool, and draw shame and misery upon the man’s self?” If to break loose from the conduct of reason, and to want that restraint of examination and judgment, which keeps us from choosing or doing the worse, be liberty, true liberty, madmen and fools are the only freemen: but yet, I think, nobody would choose to be mad for the sake of such liberty, but he that is mad already. The constant desire of happiness, and the constraint it puts upon us to act for it, nobody, I think, accounts an abridgment of liberty, or at least an abridgment of liberty to be complained of. God Almighty himself is under the necessity of being happy; and the more any intelligent being is so, the nearer is its approach to infinite perfection and happiness. That in this state of ignorance we short-sighted creatures might not mistake true felicity, we are endowed with a power to suspend any particular desire, and keep it from determining the will, and engaging us in action. This is standing still, where we are not sufficiently assured of the way: examination is consulting a guide. The determination of the will upon inquiry is following the direction of that guide: and he that has a power to act or not to act, according as such determination directs, is a free agent; such determination abridges not that power wherein liberty consists. He that has his chains knocked off, and the prison doors set open to him, is perfectly at liberty, because he may either go or stay, as he best likes; though his preference be determined to stay, by the darkness of the night, or illness of the weather, or want of other lodging. He ceases not to be free, though the desire of some convenience to be had there absolutely determines his preference, and makes him stay in his prison.

The necessity of pursuing true happiness, the foundation of liberty. § 51. As therefore the highest perfection of intellectual nature lies in a careful and constant pursuit of true and solid happiness, so the care of ourselves, that we mistake not imaginary for real happiness, is the necessary foundation of our liberty.

The stronger ties we have to an unalterable pursuit of happiness in general, which is our greatest good, and

which, as such, our desires always follow, the more are we free from any necessary determination of our will to any particular action, and from a necessary compliance with our desire, set upon any particular, and then appearing preferable good, till we have duly examined, whether it has a tendency to, or be inconsistent with our real happiness : and therefore till we are as much informed upon this inquiry, as the weight of the matter, and the nature of the case demands ; we are, by the necessity of preferring and pursuing true happiness as our greatest good, obliged to suspend the satisfaction of our desires in particular cases.

§ 52. This is the hinge on which turns The reason
the liberty of intellectual beings, in their of it.
constant endeavours after and a steady prosecution of true felicity, that they can suspend this prosecution in particular cases, till they have looked before them, and informed themselves whether that particular thing, which is then proposed or desired, lie in the way to their main end, and make a real part of that which is their greatest good : for the inclination and tendency of their nature to happiness is an obligation and motive to them, to take care not to mistake or miss it ; and so necessarily puts them upon caution, deliberation, and wariness, in the direction of their particular actions, which are the means to obtain it. Whatever necessity determines to the pursuit of real bliss, the same necessity with the same force establishes suspense, deliberation, and scrutiny of each successive desire, whether the satisfaction of it does not interfere with our true happiness, and mislead us from it. This, as seems to me, is the great privilege of finite intellectual beings ; and I desire it may be well considered, whether the great inlet and exercise of all the liberty men have, are capable of, or can be useful to them, and that whereon depends the turn of their actions, does not lie in this, that they can suspend their desires, and stop them from determining their wills to any action, till they have duly and fairly examined the good and evil of it, as far forth as the weight of the thing requires. This we are able to do, and when we

have done it, we have done our duty, and all that is in our power, and indeed all that needs. For since the will supposes knowledge to guide its choice, and all that we can do is to hold our wills undetermined, till we have examined the good and evil of what we desire. What follows after that, follows in a chain of consequences linked one to another, all depending on the last determination of the judgment; which, whether it shall be upon a hasty and precipitate view, or upon a due and mature examination, is in our power; experience showing us, that in most cases we are able to suspend the present satisfaction of any desire.

§ 53. But if any extreme disturbance (as sometimes it happens) possesses our whole mind, as when the pain of the rack, an impetuous uneasiness, as of love, anger, or any other violent passion, running away with us, allows us not the liberty of thought, and we are not masters enough of our own minds to consider thoroughly and examine fairly; God, who knows our frailty, pities our weakness, and requires of us no more than we are able to do, and sees what was and what was not in our power, will judge as a kind and merciful father. But the forbearance of a too hasty compliance with our desires, the moderation and restraint of our passions, so that our understandings may be free to examine, and reason unbiassed give its judgment, being that whereon a right direction of our conduct to true happiness depends; it is in this we should employ our chief care and endeavours. In this we should take pains to suit the relish of our minds to the true intrinsic good or ill that is in things, and not permit an allowed or supposed possible great and weighty good to slip out of our thoughts, without leaving any relish, any desire of itself there, till, by a due consideration of its true worth, we have formed appetites in our minds suitable to it, and made ourselves uneasy in the want of it, or in the fear of losing it. And how much this is in every one's power, by making resolutions to himself, such as he may keep, is easy for every one to try. Nor let any one say he cannot go-

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vern his passions, nor hinder them from breaking out, and carrying him into action ; for what he can do before a prince, or a great man, he can do alone, or in the presence of God, if he will.

§ 54. From what has been said, it is How men easy to give an account how it comes to come to pur- pass, that though all men desire happiness, sue different yet their wills carry them so contrarily, and courses. consequently some of them to what is evil. And to this I say, that the various and contrary choices that men make in the world, do not argue that they do not all pursue good ; but that the same thing is not good to every man alike. This variety of pursuits shows, that every one does not place his happiness in the same thing, or choose the same way to it. Were all the concerns of man terminated in this life, why one followed study and knowledge, and another hawking and hunting : why one chose luxury and debauchery, and another sobriety and riches ; would not be, because every one of these did not aim at his own happiness, but because their happiness was placed in different things. And therefore it was a right answer of the physician to his patient that had sore eyes : If you have more pleasure in the taste of wine than in the use of your sight, wine is good for you ; but if the pleasure of seeing be greater to you than that of drinking, wine is naught.

§ 55. The mind has a different relish, as well as the palate ; and you will as fruitlessly endeavour to delight all men with riches or glory (which yet some men place their happiness in) as you would to satisfy all men's hunger with cheese or lobsters ; which, though very agreeable and delicious fare to some, are to others extremely nauseous and offensive : and many people would with reason prefer the griping of an hungry belly, to those dishes which are a feast to others. Hence it was, I think, that the philosophers of old did in vain enquire, whether summum bonum consisted in riches or bodily delights, or virtue, or contemplation. And they might have as reasonably disputed, whether the best relish were to be found in apples, plums, or nuts ; and have divided themselves into sects upon it.

For as pleasant tastes depend not on the things themselves, but their agreeableness to this or that particular palate, wherein there is great variety: so the greatest happiness consists in the having those things which produce the greatest pleasure, and in the absence of those which cause any disturbance, any pain. Now these, to different men, are very different things. If therefore men in this life only have hope, if in this life they can only enjoy, it is not strange nor unreasonable, that they should seek their happiness by avoiding all things that disease them here, and by pursuing all that delight them; wherein it will be no wonder to find variety and difference. For if there be no prospect beyond the grave, the inference is certainly right, "let us eat and drink," let us enjoy what we delight in, "for to-morrow we shall die." This, I think, may serve to show us the reason, why, though all men's desires tend to happiness, yet they are not moved by the same object. Men may choose different things, and yet all choose right; supposing them only like a company of poor insects, whereof some are bees, delighted with flowers and their sweetness; others beetles, delighted with other kinds of viands, which having enjoyed for a season, they would cease to be, and exist no more for ever.

How men
come to
choose ill.

§ 56. These things duly weighed, will give us, as I think, a clear view into the state of human liberty. Liberty, it is plain, consists in a power to do, or not to do; to do, or forbear doing, as we will. This cannot be denied. But this seeming to comprehend only the actions of a man consecutive to volition, it is farther inquired, "whether he be at liberty to will, or no." And to this it has been answered, that in most cases a man is not at liberty to forbear the act of volition: he must exert an act of his will, whereby the action proposed is made to exist, or not to exist. But yet there is a case wherein a man is at liberty in respect of willing, and that is, the choosing of a remote good, as an end to be pursued. Here a man may suspect the act of his choice from being determined for or against the thing

proposed, till he has examined whether it be really of a nature in itself and consequences to make him happy, or no. For when he has once chosen it, and thereby it is become a part of his happiness, it raises desire, and that proportionably gives him uneasiness, which determines his will, and sets him at work in pursuit of his choice on all occasions that offer. And here we may see how it comes to pass, that a man may justly incur punishment, though it be certain that in all the particular actions that he wills, he does, and necessarily does will that which he then judges to be good. For, though his will be always determined by that which is judged good by his understanding, yet it excuses him not: because, by a too hasty choice of his own making, he has imposed on himself wrong measures of good and evil; which, however false and fallacious, have the same influence on all his future conduct, as if they were true and right. He has vitiated his own palate, and must be answerable to himself for the sickness and death that follows from it. The eternal law and nature of things must not be altered, to comply with his ill-ordered choice. If the neglect, or abuse, of the liberty he had to examine what would really and truly make for his happiness, misleads him, the miscarriages that follow on it must be imputed to his own election. He had a power to suspend his determination: it was given him, that he might examine, and take care of his own happiness, and look that he were not deceived. And he could never judge, that it was better to be deceived than not, in a matter of so great and near concernment.

What has been said may also discover to us the reason why men in this world prefer different things, and pursue happiness by contrary courses. But yet, since men are always constant, and in earnest, in matters of happiness and misery, the question still remains, How men come often to prefer the worse to the better; and to choose that, which by their own confession, has made them miserable?

§ 57. To account for the various and contrary ways men take, though all aim at being happy, we must con-

sider whence the various uneasinesses, that determine the will in the preference of each voluntary action, have their rise.

From bodily pains. 1. Some of them come from causes not in our power; such as are often the pains

of the body, from want, disease, or outward injuries, as the rack, &c. which, when present and violent, operate for the most part forcibly on the will, and turn the courses of men's lives from virtue, piety, and religion, and what before they judged to lead to happiness; every one not endeavouring, or through disuse not being able, by the contemplation of remote and future good, to raise in himself desires of them strong enough to counterbalance the uneasiness he feels in those bodily torments, and to keep his will steady in the choice of those actions which lead to future happiness. A neighbour country has been of late a tragical theatre, from which we might fetch instances, if there needed any, and the world did not in all countries and ages furnish examples enough to confirm that received observation, "*neccessitas cogit ad turpia*;" and therefore there is great reason for us to pray, "lead us not into temptation."

From wrong desires, arising from wrong judgment. 2. Other uneasinesses arise from our desires of absent good; which desires always bear proportion to, and depend on the judgment we make, and the relish we have of any absent good: in both which we are apt to be variously misled, and that by our own fault.

Our judgment of present good or evil always right. § 58. In the first place, I shall consider the wrong judgments men make of future good and evil, whereby their desires are misled. For, as to present happiness and misery, when that alone comes into consideration, and the consequences are quite removed, a man never chooses amiss; he knows what best pleases him, and that he actually prefers. Things in their present enjoyment are what they seem: the apparent and real good are, in this case, always the same. For the pain or pleasure being just so great, and no greater than it is felt, the present good or evil is really so much

as it appears. And therefore, were every action of ours concluded within itself, and drew no consequences after it, we should undoubtedly never err in our choice of good; we should always infallibly prefer the best. Were the pains of honest industry, and of starving with hunger and cold, set together before us, nobody would be in doubt which to choose; were the satisfaction of a lust, and the joys of heaven offered at once to any one's present possession, he would not balance, or err in the determination of his choice.

§ 59. But since our voluntary actions carry not all the happiness and misery that depend on them, along with them in their present performance, but are the precedent causes of good and evil, which they draw after them, and bring upon us, when they themselves are passed and cease to be; our desires look beyond our present enjoyments, and carry the mind out to absent good, according to the necessity which we think there is of it, to the making or increase of our happiness. It is our opinion of such a necessity, that gives it its attraction: without that, we are not moved by absent good. For in this narrow scantling of capacity, which we are accustomed to, and sensible of here, wherein we enjoy but one pleasure at once, which, when all uneasiness is away, is, whilst it lasts, sufficient to make us think ourselves happy; it is not all remote, and even apparent good, that affects us. Because the indolency and enjoyment we have, sufficing for our present happiness, we desire not to venture the change; since we judge that we are happy already, being content, and that is enough. For who is content is happy. But as soon as any new uneasiness comes in, this happiness is disturbed, and we are set afresh on work in the pursuit of happiness.

§ 60. Their aptness, therefore, to conclude that they can be happy without it, is one great occasion that men often are not raised to the desire of the greatest absent good. For whilst such thoughts possess them, the joys of a future state move them not: they have little concern or uneasiness about them;

From a wrong judgment of what makes a necessary part of their happiness.

and the will, free from the determination of such desires, is left to the pursuit of nearer satisfactions, and to the removal of those uneasinesses which it then feels, in its want of and longings after them. Change but a man's view of these things; let him see, that virtue and religion are necessary to his happiness; let him look into the future state of bliss or misery, and see there God, the righteous judge, ready to "render to every man according to his deeds; to them who by patient continuance in well-doing seek for glory, and honour, and immortality, eternal life; but unto every soul that doth evil, indignation and wrath, tribulation and anguish:" to him, I say, who hath a prospect of the different state of perfect happiness, or misery, that attends all men after this life, depending on their behaviour here, the measures of good and evil, that govern his choice, are mightily changed. For since nothing of pleasure and pain in this life can bear any proportion to the endless happiness, or exquisite misery, of an immortal soul hereafter; actions in his power will have their preference, not according to the transient pleasure or pain that accompanies or follows them here, but as they serve to secure that perfect durable happiness hereafter.

A more particular account of wrong judgments. § 61. But to account more particularly for the misery that men often bring on themselves, notwithstanding that they do all in earnest pursue happiness, we must consider how things come to be represented to our desires, under deceitful appearances; and that is by the judgment pronouncing wrongly concerning them. To see how far this reaches, and what are the causes of wrong judgment, we must remember that things are judged good or bad in a double sense.

First, That which is properly good or bad, is nothing but barely pleasure or pain.

Secondly, But because not only present pleasure and pain, but that also which is apt by its efficacy or consequences to bring it upon us at a distance, is a proper object of our desires, and apt to move a creature that has foresight; therefore things also that draw after

them pleasure and pain, are considered as good and evil.

§ 62. The wrong judgment that misleads us, and makes the will often fasten on the worse side, lies in misreporting upon the various comparisons of these. The wrong judgment I am here speaking of, is not what one man may think of the determination of another, but what every man himself must confess to be wrong. For since I lay it for a certain ground, that every intelligent being really seeks happiness, which consists in the enjoyment of pleasure, without any considerable mixture of uneasiness; it is impossible any one should willingly put into his own draught any bitter ingredient, or leave out any thing in his power, that would tend to his satisfaction, and the completing of his happiness, but only by wrong judgment. I shall not here speak of that mistake which is the consequence of invincible error, which scarce deserves the name of wrong judgment; but of that wrong judgment which every man himself must confess to be so.

§ 63. I. Therefore, as to present pleasure and pain, the mind, as has been said, In comparing present and future. never mistakes that which is really good or evil; that which is the greater pleasure, or the greater pain, is really just as it appears. But though present pleasure and pain show their difference and degrees so plainly, as not to leave room for mistake; yet when we compare present pleasure or pain with future, (which is usually the case in the most important determinations of the will) we often make wrong judgments of them, taking our measures of them in different positions of distance. Objects, near our view, are apt to be thought greater than those of a larger size, that are more remote; and so it is with pleasures and pains; the present is apt to carry it, and those at a distance have the disadvantage in the comparison. Thus most men, like spendthrift heirs, are apt to judge a little in hand better than a great deal to come; and so, for small matters in possession, part with greater ones in reversion. But that this is a wrong judgment, every one must allow, let his pleasure consist in whatever it

will; since that which is future will certainly come to be present; and then having the same advantage of nearness, will show itself in its full dimensions, and discover his wilful mistake, who judged of it by unequal measures. Were the pleasure of drinking accompanied, the very moment a man takes off his glass, with that sick stomach and aching head, which, in some men, are sure to follow not many hours after; I think nobody, whatever pleasure he had in his cups, would, on these conditions, ever let wine touch his lips; which yet he daily swallows; and the evil side comes to be chosen only by the fallacy of a little difference in time. But if pleasure or pain can be so lessened only by a few hours' removal, how much more will it be so by a farther distance, to a man that will not by a right judgment do what time will, i. e. bring it home upon himself, and consider it as present, and there take its true dimensions? This is the way we usually impose on ourselves, in respect of bare pleasure and pain, or the true degrees of happiness or misery; the future loses its just proportion, and what is present obtains the preference as the greater. I mention not here the wrong judgment, whereby the absent are not only lessened, but reduced to perfect nothing; when men enjoy what they can in present, and make sure of that, concluding amiss that no evil will thence follow. For that lies not in comparing the greatness of future good and evil, which is that we are here speaking of; but in another sort of wrong judgment, which is concerning good or evil, as it is considered to be the cause and procurement of pleasure or pain, that will follow from it.

§ 64. The cause of our judging amiss, Causes of this. when we compare our present pleasure or pain with future, seems to me to be the weak and narrow constitution of our minds. We cannot well enjoy two pleasures at once, much less any pleasure almost, whilst pain possesses us. The present pleasure, if it be not very languid, and almost none at all, fills our narrow souls, and so takes up the whole mind, that it scarce leaves any thought of things ab-

sent : or if among our pleasures, there are some which are not strong enough to exclude the consideration of things at a distance ; yet we have so great an abhorrence of pain, that a little of it extinguishes all our pleasures : a little bitter mingled in our cup, leaves no relish of the sweet. Hence it comes, that at any rate we desire to be rid of the present evil, which we are apt to think nothing absent can equal ; because, under the present pain, we find not ourselves capable of any the least degree of happiness. Men's daily complaints are a loud proof of this : the pain that any one actually feels is still of all other the worst ; and it is with anguish they cry out, " Any rather than this : nothing " can be so intolerable as what I now suffer." And therefore our whole endeavours and thoughts are intent to get rid of the present evil before all things, as the first necessary condition to our happiness, let what will follow. Nothing, as we passionately think, can exceed, or almost equal, the uneasiness that sits so heavy upon us. And because the abstinence from a present pleasure that offers itself, is a pain, nay oftentimes a very great one, the desire being inflamed by a near and tempting object ; it is no wonder that that operates after the same manner pain does, and lessens in our thoughts what is future ; and so forees, as it were, blindfold into its embraces.

§ 65. Add to this, that absent good, or, which is the same thing, future pleasure, especially if of a sort we are unacquainted with, seldom is able to counterbalance any uneasiness, either of pain or desire, which is present. For its greatness being no more than what shall be really tasted when enjoyed, men are apt enough to lessen that, to make it give place to any present desire ; and conclude with themselves, that when it comes to trial, it may possibly not answer the report, or opinion that generally passes of it ; they having often found, that not only what others have magnified, but even what they themselves have enjoyed with great pleasure and delight at one time, has proved insipid or nauseous at another ; and therefore they see nothing in it for which they should forego a present enjoyment,

But that this is a false way of judging, when applied to the happiness of another life, they must confess ; unless they will say, “ God cannot make those happy he designs to be so.” For that being intended for a state of happiness, it must certainly be agreeable to every one’s wish and desire : could we suppose their relishes as different there as they are here, yet the manna in heaven will suit every one’s palate. Thus much of the wrong judgment we make of present and future pleasure and pain, when they are compared together, and so the absent considered as future.

§ 66. II. As to things good or bad in their consequences, and by the aptness is in them to procure us good or evil in the future, we judge amiss several ways.

1. When we judge that so much evil does not really depend on them, as in truth there does.

2. When we judge, that though the consequence be of that moment, yet it is not of that certainty, but that it may otherwise fall out, or else by some means be avoided as by industry, address, change, repentance, &c. That these are wrong ways of judging, were easy to show in every particular, if I would examine them at large singly : but I shall only mention this in general, viz. that it is a very wrong and irrational way of proceeding, to venture a greater good for a less, upon uncertain guesses, and before a due examination be made proportionable to the weightiness of the matter, and the concernment it is to us not to mistake. This, I think, every one must confess, especially if he considers the usual causes of his wrong judgment, whereof these following are some.

Causes of this. § 67. I. Ignorance : he that judges without informing himself to the utmost that he is capable, cannot acquit himself of judging amiss.

II. Inadvertency : when a man overlooks even that which he does know. This is an affected and present ignorance, which misleads our judgments as much as the other. Judging is, as it were, balancing an account, and determining on which side the odds lie.

If therefore either side be huddled up in haste, and several of the sums, that should have gone into the reckoning, be overlooked and left out, this precipitancy causes as wrong a judgment, as if it were a perfect ignorance. That which most commonly causes this, is the prevalency of some present pleasure or pain, heightened by our feeble passionate nature, most strongly wrought on by what is present. To check this precipitancy, our understanding and reason was given us, if we will make a right use of it, to search and see, and then judge thereupon. Without liberty, the understanding would be to no purpose; and without understanding, liberty (if it could be) would signify nothing. If a man sees what would do him good or harm, what would make him happy or miserable, without being able to move himself one step towards or from it, what is he the better for seeing? And he that is at liberty to ramble in perfect darkness, what is his liberty better, than if he were driven up and down as a bubble by the force of the wind? The being acted by a blind impulse from without, or from within, is little odds. The first, therefore, and great use of liberty, is to hinder blind precipitancy; the principal exercise of freedom is to stand still, open the eyes, look about, and take a view of the consequence of what we are going to do, as much as the weight of the matter requires. How much sloth and negligence, heat and passion, the prevalency of fashion, or acquired indispositions, do severally contribute on occasion to these wrong judgments, I shall not here farther inquire. I shall only add one other false judgment, which I think necessary to mention, because perhaps it is little taken notice of, though of great influence.

§ 68. All men desire happiness, that is Wrongjudgment of what is necessary to our happiness. All men desire happiness, that is past doubt; but, as has been already observed, when they are rid of pain, they are apt to take up with any pleasure at hand, or that custom has endeared to them, to rest satisfied in that; and so being happy, till some new desire, by making them uneasy, disturbs that happiness, and shows them that they are not so, they look no far-

ther; nor is the will determined to any action, in pursuit of any other known or apparent good. For since we find, that we cannot enjoy all sorts of good, but one excludes another; we do not fix our desires on every apparent greater good, unless it be judged to be necessary to our happiness; if we think we can be happy without it, it moves us not. This is another occasion to men of judging wrong, when they take not that to be necessary to their happiness, which really is so. This mistake misleads us both in the choice of the good we aim at, and very often in the means to it, when it is a remote good. But which way ever it be, either by placing it where really it is not, or by neglecting the means as not necessary to it; when a man misses his great end happiness, he will acknowledge he judged not right. That which contributes to this mistake, is the real or supposed unpleasantness of the actions, which are the way to this end; it seeming so preposterous a thing to men, to make themselves unhappy in order to happiness, that they do not easily bring themselves to it.

§ 69. The last inquiry, therefore, concerning this matter is, “whether it be in a man’s power to change the pleasantness and unpleasantness that accompanies any sort of action?” And as to that, it is plain, in many cases he can. Men may and should correct their palates, and give relish to what either has, or they suppose has none. The relish of the mind is as various as that of the body, and like that too may be altered; and it is a mistake to think, that men cannot change the displeasingness or indifferency that is in actions into pleasure and desire, if they will do but what is in their power. A due consideration will do it in some cases; and practice, application, and custom in most. Bread or tobacco may be neglected, where they are shown to be useful to health, because of an indifferency or disrelish to them; reason and consideration at first recommend, and begin their trial, and use finds, or custom makes them pleasant. That this is so in virtue too, is very certain. Actions

are pleasing or displeasing, either in themselves, or considered as a means to a greater and more desirable end. The eating of a well-seasoned dish, suited to a man's palate, may move the mind by the delight itself that accompanies the eating, without reference to any other end: to which the consideration of the pleasure there is in health and strength (to which that meat is subservient) may add a new gusto, able to make us swallow an ill-relished potion. In the latter of these, any action is rendered more or less pleasing, only by the contemplation of the end, and the being more or less persuaded of its tendency to it, or necessary connection with it: but the pleasure of the action itself is best acquired or increased by use and practice. Trials often reconcile us to that, which at a distance we looked on with aversion; and by repetitions wear us into a liking of what possibly, in the first essay, displeased us. Habits have powerful charms, and put so strong attractions of easiness and pleasure into what we accustom ourselves to, that we cannot forbear to do, or at least, be easy in the omission of actions, which habitual practice has suited, and thereby recommends to us. Though this be very visible, and every one's experience shows him he can do so; yet it is a part in the conduct of men towards their happiness, neglected to a degree, that it will be possibly entertained as a paradox, if it be said, that men can make things or actions more or less pleasing to themselves; and thereby remedy that, to which one may justly impute a great deal of their wandering. Fashion and the common opinion having settled wrong notions, and education and custom ill habits, the just values of things are misplaced, and the palates of men corrupted. Pains should be taken to rectify these; and contrary habits change our pleasures, and give a relish to that which is necessary or conducive to our happiness. This every one must confess he can do; and when happiness is lost, and misery overtakes him, he will confess he did amiss in neglecting it, and condemn himself for it: and I ask every one, whether he has not often done so?

Preference
of vice to
virtue a ma-
nifest wrong
judgment.

§ 70. I shall not now enlarge any farther on the wrong judgments and neglect of what is in their power, whereby men mislead themselves. This would make a volume, and is not my business. But whatever false notions, or shameful neglect of what is in their power, may put men out of their way to happiness, and distract them, as we see, into so different courses of life, this yet is certain, that morality, established upon its true foundations, cannot but determine the choice in any one that will but consider: and he that will not be so far a rational creature as to reflect seriously upon infinite happiness and misery, must needs condemn himself as not making that use of his understanding he should. The rewards and punishments of another life, which the Almighty has established as the enforcements of his law, are of weight enough to determine the choice, against whatever pleasure or pain this life can show, when the eternal state is considered but in its bare possibility, which nobody can make any doubt of. He that will allow exquisite and endless happiness to be but the possible consequence of a good life here, and the contrary state the possible reward of a bad one; must own himself to judge very much amiss if he does not conclude, that a virtuous life, with the certain expectation of everlasting bliss, which may come, is to be preferred to a vicious one, with the fear of that dreadful state of misery, which it is very possible may overtake the guilty; or at best the terrible uncertain hope of annihilation. This is evidently so, though the virtuous life here had nothing but pain, and the vicious continual pleasure: which yet is, for the most part, quite otherwise, and wicked men have not much the odds to brag of, even in their present possession; nay, all things rightly considered, have, I think, even the worst part here. But when infinite happiness is put into one scale against infinite misery in the other; if the worst that comes to the pious man, if he mistakes, be the best that the wicked can attain to, if he be in the right, who can without madness run the

venture? Who in his wits would choose to come within a possibility of infinite misery, which if he miss, there is yet nothing to be got by that hazard? Whereas on the other side, the sober man ventures nothing against infinite happiness to be got, if his expectation comes to pass. If the good man be in the right, he is eternally happy; if he mistakes, he is not miserable, he feels nothing. On the other side, if the wicked be in the right, he is not happy; if he mistakes, he is infinitely miserable. Must it not be a most manifest wrong judgment that does not presently see to which side, in this case, the preference is to be given? I have forbore to mention any thing of the certainty or probability of a future state, designing here to show the wrong judgment that any one must allow he makes upon his own principles, laid how he pleases, who prefers the short pleasures of a vicious life upon any consideration, whilst he knows, and cannot but be certain, that a future life is at least possible.

§ 71. To conclude this inquiry into human liberty, which as it stood before, I ^{Recapitulation.} myself from the beginning fearing, and a very judicious friend of mine, since the publication, suspecting to have some mistake in it, though he could not particularly show it me, I was put upon a stricter review of this chapter. Wherein lighting upon a very easy and scarce observable slip I had made, in putting one seemingly indifferent word for another, that discovery opened to me this present view, which here, in this second edition, I submit to the learned world, and which in short is this: "Liberty is a power to act or not to act, according as the mind directs." A power to direct the operative faculties to motion or rest in particular instances, is that which we call the will. That which, in the train of our voluntary actions, determines the will to any change of operation, is some present uneasiness; which is, or at least is always accompanied with, that of desire. Desire is always moved by evil, to fly it: because a total freedom from pain always makes a necessary part of our happiness: but every good, nay every greater good, does not constantly move desire, because it may not make, or may

not be taken to make any necessary part of our happiness. For all that we desire, is only to be happy. But though this general desire of happiness operates constantly and invariably, yet the satisfaction of any particular desire can be suspended from determining the will to any subservient action, till we have maturely examined, whether the particular apparent good, which we then desire, makes a part of our real happiness, or be consistent or inconsistent with it. The result of our judgment upon that examination is what ultimately determines the man, who could not be free if his will were determined by any thing but his own desire, guided by his own judgment. I know that liberty by some is placed in an indifferency of the man, antecedent to the determination of his will. I wish they, who lay so much stress on such an antecedent indifferency, as they call it, had told us plainly, whether this supposed indifferency be antecedent to the thought and judgment of the understanding, as well as to the decree of the will. For it is pretty hard to state it between them; i. e. immediately after the judgment of the understanding, and before the determination of the will, because the determination of the will immediately follows the judgment of the understanding: and to place liberty in an indifferency, antecedent to the thought and judgment of the understanding, seems to me to place liberty in a state of darkness, wherein we can neither see nor say any thing of it; at least it places it in a subject incapable of it, no agent being allowed capable of liberty, but in consequence of thought and judgment. I am not nice about phrases, and therefore consent to say, with those that love to speak so, that liberty is placed in indifferency; but it is an indifferency which remains after the judgment of the understanding; yea, even after the determination of the will: and that is an indifferency not of the man, (for after he has once judged which is best, viz. to do, or forbear, he is no longer indifferent) but an indifferency of the operative powers of the man, which remaining equally able to operate, or to forbear operating after, as before the decree of the will, are in a state, which,

if one pleases, may be called indifferency ; and as far as this indifferency reaches, a man is free, and no farther ; v. g. I have the ability to move my hand, or to let it rest ; that operative power is indifferent to move, or not to move my hand ; I am then in that respect perfectly free. My will determines that operative power to rest ; I am yet free ; because the indifferency of that my operative power to act, or not to act, still remains ; the power of moving my hand is not at all impaired by the determination of my will, which at present orders rest ; the indifferency of that power to act, or not to act, is just as it was before, as will appear, if the will puts it to the trial, by ordering the contrary. But if during the rest of my hand, it be seized by a sudden palsy, the indifferency of that operative power is gone, and with it my liberty ; I have no longer freedom in that respect, but am under a necessity of letting my hand rest. On the other side, if my hand be put into motion by a convulsion, the indifferency of that operative faculty is taken away by that motion, and my liberty in that case is lost ; for I am under a necessity of having my hand move. I have added this, to show in what sort of indifferency liberty seems to me to consist, and not in any other, real or imaginary.

§ 72. True notions concerning the nature and extent of liberty are of so great importance, that I hope I shall be pardoned this digression, which my attempt to explain it has led me into. The idea of will, volition, liberty and necessity, in this chapter of power, came naturally in my way. In a former edition of this treatise, I gave an account of my thoughts concerning them, according to the light I then had ; and now, as a lover of truth, and not a worshipper of my own doctrines, I own some change of my opinion, which I think I have discovered ground for. In what I first writ, I with an unbiassed indifferency followed truth, whither I thought she led me. But neither being so vain as to fancy infallibility, nor so disingenuous as to dissemble my mistakes, for fear of blemishing my reputation, I have, with the same sincere design for truth

only, not been ashamed to publish what a severer inquiry has suggested. It is not impossible but that some may think my former notions right, and some (as I have already found) these latter, and some neither. I shall not at all wonder at this variety in men's opinions; impartial deductions of reason in controverted points being so rare, and exact ones in abstract notions not so very easy, especially if of any length. And therefore I should think myself not a little beholden to any one, who would upon these, or any other grounds, fairly clear this subject of liberty from any difficulties that may yet remain.

Before I close this chapter, it may perhaps be to our purpose, and help to give us clearer conceptions about power, if we make our thoughts take a little more exact survey of action. I have said above, that we have ideas but of two sorts of action, viz. motion and thinking. These, in truth, though called and counted actions, yet if nearly considered, will not be found to be always perfectly so. For, if I mistake not, there are instances of both kinds, which, upon due consideration, will be found rather passions than actions, and consequently so far the effects barely of passive powers in those subjects, which yet on their accounts are thought agents. For in these instances, the substance that hath motion or thought receives the impression, where it is put into that action purely from without, and so acts merely by the capacity it has to receive such an impression from some external agent; and such a power is not properly an active power, but a mere passive capacity in the subject. Sometimes the substance or agent puts itself into action by its own power; and this is properly active power. Whatsoever modification a substance has, whereby it produces any effect, that is called action; v. g. a solid substance by motion operates on, or alters the sensible ideas of another substance; and therefore this modification of motion we call action. But yet this motion in that solid substance is, when rightly considered, but a passion, if it received it only from some external agent. So that the active power of motion is in no substance

which cannot begin motion in itself, or in another substance, when at rest. So likewise in thinking, a power to receive ideas or thoughts, from the operation of any external substance, is called a power of thinking: but this is but a passive power, or capacity. But to be able to bring into view ideas out of sight at one's own choice, and to compare which of them one thinks fit, this is an active power. This reflection may be of some use to preserve us from mistakes about powers and actions, which grammar and the common frame of languages may be apt to lead us into; since what is signified by verbs that grammarians call active, does not always signify action: v. g. this proposition, I see the moon, or a star, or I feel the heat of the sun, though expressed by a verb active, does not signify any action in me, whereby I operate on those substances; but the reception of the ideas of light, roundness and heat, wherein I am not active, but barely passive, and cannot in that position of my eyes, or body, avoid receiving them. But when I turn my eyes another way, or remove my body out of the sun-beams, I am properly active; because of my own choice, by a power within myself, I put myself into that motion. Such an action is the product of active power.

§ 73. And thus I have, in a short draught, given a view of our original ideas, from whence all the rest are derived, and of which they are made up; which if I would consider, as a philosopher, and examine on what causes they depend, and of what they are made, I believe they all might be reduced to these very few primary and original ones, viz. Extension, Solidity, Mobility, or the power of being moved; which by our senses we receive from body; Perceptivity, or the power of perception, or thinking; Motivity, or the power of moving; which by reflection we receive from our minds. I crave leave to make use of these two new words, to avoid the danger of being mistaken in the use of those which are equivocal. To which if we add Existence, Duration, Number; which belong both to the one and the other; we have, perhaps, all the original ideas, on which the rest depend. For by

these, I imagine, might be explained the nature of colours, sounds, tastes, smells, and all other ideas we have, if we had but faculties acute enough to perceive the severally modified extensions and motions of these minute bodies, which produce those several sensations in us. But my present purpose being only to inquire into the knowledge the mind has of things, by those ideas and appearances, which God has fitted it to receive from them, and how the mind comes by that knowledge, rather than into their causes, or manner of production; I shall not, contrary to the design of this essay, set myself to inquire philosophically into the peculiar constitution of bodies, and the configuration of parts, whereby they have the power to produce in us the ideas of their sensible qualities: I shall not enter any farther into that disquisition, it sufficing to my purpose to observe, that gold or saffron has a power to produce in us the idea of yellow, and snow or milk the idea of white, which we can only have by our sight, without examining the texture of the parts of those bodies, or the particular figures or motion of the particles which rebound from them, to cause in us that particular sensation: though when we go beyond the bare ideas in our minds, and would inquire into their causes, we cannot conceive any thing else to be in any sensible object, whereby it produces different ideas in us, but the different bulk, figure, number, texture, and motion of its insensible parts.

CHAP. XXII.

Of mixed Modes.

Mixed modes, what. § 1. HAVING treated of simple modes in the foregoing chapters, and given several instances of some of the most considerable of them, to show what they are, and how we come by them; we are now in the next place to consider those we call mixed

modes: such are the complex ideas we mark by the names Obligation, Drunkenness, a Lye, &c. which consisting of several combinations of simple ideas of different kinds, I have called mixed modes, to distinguish them from the more simple modes, which consist only of simple ideas of the same kind. These mixed modes being also such combinations of simple ideas, as are not looked upon to be characteristical marks of any real beings that have a steady existence, but scattered and independent ideas put together by the mind, are thereby distinguished from the complex ideas of substances.

§ 2. That the mind, in respect of its simple ideas, is wholly passive, and receives ^{Made by the mind.} them all from the existence and operations of things, such as sensation or reflection offers them, without being able to make any one idea, experience shows us: but if we attentively consider these ideas I call mixed modes, we are now speaking of, we shall find their original quite different. The mind often exercises an active power in making these several combinations: for it being once furnished with simple ideas, it can put them together in several compositions, and so make variety of complex ideas, without examining whether they exist so together in nature. And hence I think it is that these ideas are called notions, as if they had their original and constant existence more in the thoughts of men, than in the reality of things; and to form such ideas, it sufficed, that the mind puts the parts of them together, and that they were consistent in the understanding, without considering whether they had any real being: though I do not deny, but several of them might be taken from observation, and the existence of several simple ideas so combined, as they are put together in the understanding. For the man who first framed the idea of hypocrisy, might have either taken it at first from the observation of one, who made show of good qualities which he had not, or else have framed that idea in his mind, without having any such pattern to fashion it by: for it is evident, that in the beginning of languages and societies of men, several of those complex ideas, which were consequent to the con-

stitutions established amongst them, must needs have been in the minds of men, before they existed any where else: and that many names that stood for such complex ideas were in use, and so those ideas framed before the combinations they stood for ever existed.

Sometimes
got by the
explication
of their
names.

§ 3. Indeed now that languages are made, and abound with words standing for such combinations, an usual way of getting these complex ideas is by the explication of those terms that stand for them. For consisting of a company of simple ideas combined, they may by words, standing for those simple ideas, be represented to the mind of one who understands those words, though that complex combination of simple ideas were never offered to his mind by the real existence of things. Thus a man may come to have the idea of sacrilege or murder, by enumerating to him the simple ideas which these words stand for, without ever seeing either of them committed.

The name
ties the parts
of mixed
modes into
one idea.

§ 4. Every mixed mode consisting of many distinct simple ideas, it seems reasonable to inquire, "whence it has its unity, and how such a precise multitude comes to make but one idea, since that combination does not always exist together in nature?" To which I answer, it is plain it has its unity from an act of the mind combining those several simple ideas together, and considering them as one complex one, consisting of those parts; and the mark of this union, or that which is looked on generally to complete it, is one name given to that combination. For it is by their names that men commonly regulate their account of their distinct species of mixed modes, seldom allowing or considering any number of simple ideas to make one complex one, but such collections as there be names for. Thus, though the killing of an old man be as fit in nature to be united into one complex idea, as the killing a man's father; yet there being no name standing precisely for the one, as there is the name of parricide to mark the other, it is not taken for a particular com-

plex idea, nor a distinct species of actions from that of killing a young man, or any other man.

§ 5. If we should inquire a little farther, ^{The cause} to see what it is that occasions men ^{of making} to make several combinations of simple ideas ^{mixed} into distinct, and, as it were, settled modes, ^{modes.} and neglect others which, in the nature of things themselves, have as much an aptness to be combined and make distinct ideas, we shall find the reason of it to be the end of language; which being to mark, or communicate men's thoughts to one another with all the dispatch that may be, they usually make such collections of ideas into complex modes, and affix names to them, as they have frequent use of in their way of living and conversation, leaving others, which they have but seldom an occasion to mention, loose and without names to tie them together; they rather choosing to enumerate (when they have need) such ideas as make them up, by the particular names that stand for them, than to trouble their memories by multiplying of complex ideas with names to them, which they seldom or never have any occasion to make use of.

§ 6. This shows us how it comes to pass, ^{Why words} that there are in every language many par- ^{in our lan-} ticular words, which cannot be rendered ^{guage have} by any one single word of another. ^{none an-} For the ^{swering in} several fashions, customs and manners of one another. nation, making several combinations of ideas familiar and necessary in one, which another people have had never any occasion to make, or perhaps so much as taken notice of; names come of course to be annexed to them, to avoid long periphrases in things of daily conversation; and so they become so many distinct complex ideas in their minds. Thus *ὑπερβασιμὸς* amongst the Greeks, and proscriptio amongst the Romans, were words which other languages had no names that exactly answered, because they stood for complex ideas, which were not in the minds of the men of other nations. Where there was no such custom, there was no notion of any such actions; no use of such combinations of ideas as were united, and as it were tied together by

those terms ; and therefore in other countries there were no names for them.

And languages change. § 7. Hence also we may see the reason why languages constantly change, take up new, and lay by old terms ; because change of customs and opinions bringing with it new combinations of ideas, which it is necessary frequently to think on, and talk about, new names, to avoid long descriptions, are annexed to them, and so they become new species of complex modes. What a number of different ideas are by this means wrapt up in one short sound, and how much of our time and breath is thereby saved, any one will see, who will but take the pains to enumerate all the ideas that either reprieve or appeal stand for ; and, instead of either of those names, use a periphrasis, to make any one understand their meaning.

Mixed modes, where they exist. § 8. Though I shall have occasion to consider this more at large, when I come to treat of words and their use ; yet I could not avoid to take thus much notice here of the names of mixed modes ; which being fleeting and transient combinations of simple ideas, which have but a short existence any where but in the minds of men, and there too have no longer any existence, than whilst they are thought on, have not so much any where the appearance of a constant and lasting existence, as in their names : which are therefore, in this sort of ideas, very apt to be taken for the ideas themselves. For if we should enquire where the idea of a triumph or apotheosis exists, it is evident they could neither of them exist altogether any where in the things themselves, being actions that required time to their performance, and so could never all exist together : and as to the minds of men, where the ideas of these actions are supposed to be lodged, they have there too a very uncertain existence ; and therefore we are apt to annex them to the names that excite them in us.

How we get the ideas of mixed modes. § 9. There are therefore three ways whereby we get the complex ideas of mixed modes. 1. By experience and observation of things themselves. Thus by seeing two

men wrestle or fence, we get the idea of wrestling or fencing. 2. By invention, or voluntary putting together of several simple ideas in our minds: so he that first invented printing, or etching, had an idea of it in his mind, before it ever existed. 3. Which is the most usual way, by explaining the names of actions we never saw, or notions we cannot see; and by enumerating, and thereby, as it were, setting before our imaginations all those ideas which go to the making them up, and are the constituent parts of them. For having by sensation and reflection stored our minds with simple ideas, and by use got the names that stand for them, we can by those means represent to another any complex idea we would have him conceive; so that it has in it no simple ideas, but what he knows, and has with us the same name for. For all our complex ideas are ultimately resolvable into simple ideas, of which they are compounded and originally made up, though perhaps their immediate ingredients, as I may so say, are also complex ideas. Thus the mixed mode, which the word *lye* stands for, is made of these simple ideas; 1. Articulate sounds. 2. Certain ideas in the mind of the speaker. 3. Those words the signs of those ideas. 4. Those signs put together by affirmation or negation, otherwise than the ideas they stand for are in the mind of the speaker. I think I need not go any farther in the analysis of that complex idea we call a *lye*; what I have said is enough to show, that it is made up of simple ideas: and it could not but be an offensive tediousness to my reader, to trouble him with a more minute enumeration of every particular simple idea, that goes to this complex one; which, from what has been said, he cannot but be able to make out to himself. The same may be done in all our complex ideas whatsoever; which, however compounded and decomposed, may at last be resolved into simple ideas, which are all the materials of knowledge or thought we have, or can have. Nor shall we have reason to fear that the mind is hereby stinted to too scanty a number of ideas, if we consider what an inexhaustible stock of simple modes number and figure alone afford

us. How far then mixed modes which admit of the various combinations of different simple ideas, and their infinite modes, are from being few and scanty, we may easily imagine. So that before we have done, we shall see that nobody need be afraid he shall not have scope and compass enough for his thoughts to range in, though they be, as I pretend, confined only to simple ideas received from sensation or reflection, and their several combinations.

§ 10. It is worth our observing, which
 Motion, of all our simple ideas have been most modi-
 thinking, fied, and had most mixed ideas made out of
 and power them, with names given to them; and those
 have been most modi- have been these three; thinking and mo-
 fied. tion (which are the two ideas which com-
 prehend in them all action) and power, from whence
 these actions are conceived to flow. The simple ideas,
 I say, of thinking, motion, and power, have been those
 which have been most modified, and out of whose mo-
 difications have been made most complex modes, with
 names to them. For action being the great business
 of mankind, and the whole matter about which all
 laws are conversant, it is no wonder that the several
 modes of thinking and motion should be taken notice
 of, the ideas of them observed, and laid up in the me-
 mory, and have names assigned to them; without
 which, laws could be but ill made, or vice and disorder
 repressed. Nor could any communication be well had
 amongst men, without such complex ideas, with names
 to them: and therefore men have settled names, and
 supposed settled ideas in their minds of modes of
 action distinguished by their causes, means, objects,
 ends, instruments, time, place, and other circumstances,
 and also of their powers fitted for those actions: v. g.
 boldness is the power to speak or do what we intend,
 before others, without fear or disorder; and the Greeks
 call the confidence of speaking by a peculiar name,
παρρησία: which power or ability in man, of doing any
 thing, when it has been acquired by frequent doing the
 same thing, is that idea we name habit; when it is
 forward, and ready upon every occasion to break into

action, we call it disposition. Thus testiness is a disposition or aptness to be angry.

To conclude: Let us examine any modes of action, v. g. consideration and assent, which are actions of the mind; running and speaking, which are actions of the body; revenge and murder, which are actions of both together: and we shall find them but so many collections of simple ideas, which together make up the complex ones signified by those names.

§ 11. Power being the source from whence all action proceeds, the substances wherein these powers are, when they exert this power into act, are called causes; and the substances which thereupon are produced, or the simple ideas which are introduced into any subject by the exerting of that power, are called effects. The efficacy whereby the new substance or idea is produced, is called, in the subject exerting that power, action; but in the subject wherein any simple idea is changed or produced, it is called passion: which efficacy however various, and the effects almost infinite, yet we can, I think, conceive it, in intellectual agents, to be nothing else but modes of thinking and willing; in corporeal agents, nothing else but modifications of motion. I say, I think we cannot conceive it to be any other but these two; for whatever sort of action, besides these, produces any effects, I confess myself to have no notion or idea of; and so it is quite remote from my thoughts, apprehensions, and knowledge; and as much in the dark to me as five other senses, or as the ideas of colours to a blind man: and therefore many words, which seem to express some action, signifying nothing of the action or *modus operandi* at all, but barely the effect, with some circumstances of the subject wrought on, or cause operating; v. g. creation, annihilation, contain in them no idea of the action or manner whereby they are produced, but barely of the cause, and the thing done. And when a countryman says the cold freezes water, though the word freezing seems to import some action, yet truly it signifies nothing but the effect, viz. that water that was be-

Several words seeming to signify action, signify but the effect.

fore fluid is become hard and consistent, without containing any idea of the action whereby it is done.

§ 12. I think I shall not need to remark here, that though power and action make Mixed modes made also of other ideas. the greatest part of mixed modes, marked by names, and familiar in the minds and mouths of men; yet other simple ideas, and their several combinations, are not excluded: much less, I think, will it be necessary for me to enumerate all the mixed modes, which have been settled, with names to them. That would be to make a dictionary of the greatest part of the words made use of in divinity, ethicks, law, and politicks, and several other sciences. All that is requisite to my present design, is, to show what sort of ideas those are which I call mixed modes, how the mind comes by them, and that they are compositions made up of simple ideas got from sensation and reflection: which, I suppose, I have done.

CHAP. XXIII.

Of our complex Ideas of Substances.

§ 1. THE mind being, as I have declared, furnished with a great number of the simple Ideas of substances how made. ideas, conveyed in by the senses, as they are found in exterior things, or by reflection on its own operations, takes notice also, that a certain number of these simple ideas go constantly together; which being presumed to belong to one thing, and words being suited to common apprehensions, and made use of for quick dispatch, are called, so united in one subject, by one name: which, by inadvertency, we are apt afterward to talk of, and consider as one simple idea, which indeed is a complication of many ideas together; because, as I have said, not imagining how these simple ideas can subsist by themselves, we accustom ourselves to suppose some

substratum wherein they do subsist, and from which they do result; which therefore we call substance*.

§ 2. So that if any one will examine himself concerning his notion of pure substance in general, he will find he has no other idea of it at all, but only a supposition of he knows not what support of such qualities, which are capable of producing simple ideas in us; which qualities are commonly called accidents. If any one should be asked, what is the subject wherein colour or weight inheres, he

Our idea of
substance
in general.

* This section, which was intended only to show how the individuals of distinct species of substances came to be looked upon as simple ideas, and so to have simple names, viz. from the supposed substratum of substance, which was looked upon as the thing itself in which inhered, and from which resulted that complication of ideas, by which it was represented to us, hath been mistaken for an account of the idea of substance in general; and as such, hath been represented in these words; But how comes the general idea of substance to be framed in our minds? Is this by abstracting and enlarging simple ideas? No: 'But it is by a complication of many simple ideas together: because, not imagining how these simple ideas can subsist by themselves, we accustom ourselves to suppose some substratum wherein they do subsist, and from whence they do result; which therefore we call substance.' And is this all, indeed, that is to be said for the being of substance, That we accustom ourselves to suppose a substratum? Is that custom grounded upon true reason, or not? If not, then accidents or modes must subsist of themselves; and these simple ideas need no tortoise to support them: for figures and colours, &c. would do well enough of themselves, but for some fancies men have accustomed themselves to.

To which objection of the bishop of Worcester, our author* answers thus: Herein your lordship seems to charge me with two faults: one, That I make the general idea of substance to be framed, not by abstracting and enlarging simple ideas, but by a complication of many simple ideas together: the other, as if I had said, the being of substance had no other foundation but the fancies of men.

As to the first of these, I beg leave to remind your lordship, that I say in more places than one, and particularly Book 3. Chap. 3. § 6. and Book 1. Chap. 11. § 9. where, ex professo, I treat of abstraction and general ideas, that they are all made by abstracting, and therefore could not be understood to mean, that that of substance was made any other way; however my pen might have slept, or the negligence of expression, where I might have something else than the general idea of substance in view, might make me seem to say so.

That I was not speaking of the general idea of substance in the passage your lordship quotes, is manifest from the title of that chapter,

* In his first letter to the bishop of Worcester.

would have nothing to say, but the solid extended parts : and if he were demanded, what is it that solidity and extension adhere in, he would not be in a much better case than the Indian before-mentioned, who, saying that the world was supported by a great elephant, was asked what the elephant rested on ; to which his answer was, a great tortoise. But being again pressed to know what gave support to the broad-backed tortoise, replied, something he knew not what. And thus here, as in all other cases where

which is, Of the complex idea of substances : and the first section of it, which your lordship cites for those words you have set down.

In which words I do not observe any that deny the general idea of substance to be made by abstracting, nor any that say it is made by a complication of many simple ideas together. But speaking in that place of the ideas of distinct substances, such as man, horse, gold, &c. I say they are made up of certain combinations of simple ideas, which combinations are looked upon, each of them, as one simple idea, though they are many ; and we call it by one name of substance, though made up of modes, from the custom of supposing a substratum, wherein that combination does subsist. So that in this paragraph I only give an account of the idea of distinct substances, such as oak, elephant, iron, &c. how, though they are made up of distinct complications of modes, yet they are looked on as one idea, called by one name, as making distinct sorts of substance.

But that my notion of substance in general is quite different from these, and has no such combination of simple ideas in it, is evident from the immediate following words, where I say, * ‘ The idea of pure substance in general, is only a supposition of we know not what support of such qualities as are capable of producing simple ideas in us.’ And these two I plainly distinguish all along, particularly where I say, ‘ whatever therefore be the secret and abstract nature of substance in general, all the ideas we have of particular distinct substances, are nothing but several combinations of simple ideas, co-existing in such, though unknown cause of their union, as makes the whole subsist of itself.’

The other thing laid to my charge, is, as if I took the being of substance to be doubtful, or rendered it so by the imperfect and ill-grounded idea I have given of it. To which I beg leave to say, that I ground not the being, but the idea of substance, on our accustoming ourselves to suppose some substratum ; for it is of the idea alone I speak there, and not of the being of substance. And having every where affirmed and built upon it, that a man is a substance, I cannot be supposed to question or doubt of the being of substance, till I can question or doubt of my own being. Farther, I say, † ‘ Sensation convinces us, that there are solid, extended substances ; and reflection, that there are thinking ones.’ So that, I think, the being of substance is not shaken by what

* B. 2. C. 23. § 2.

† Ib. § 29.

we use words without having clear and distinct ideas, we talk like children; who being questioned what such a thing is, which they know not, readily give this satisfactory answer, that it is something; which in truth signifies no more, when so used either by children or men, but that they know not what; and that the thing they pretend to know and talk of, is what they have no distinct idea of at all, and so are perfectly ignorant of it, and in the dark. The idea then we have, to which we give the general name substance, being nothing but the supposed, but unknown support of those qualities we find existing, which we imagine cannot subsist, “*sine re substantie*,” without something to support them, we call that support *substantia*; which, accord-

I have said: and if the idea of it should be, yet (the being of things depending not on our ideas) the being of substance would not be at all shaken by my saying, we had but an obscure imperfect idea of it, and that that idea came from our accustoming ourselves to suppose some substratum; or indeed, if I should say, we had no idea of substance at all. For a great many things may be, and are granted to have a being, and be in nature, of which we have no ideas. For example: it cannot be doubted but there are distinct species of separate spirits, of which yet we have no distinct ideas at all; it cannot be questioned but spirits have ways of communicating their thoughts, and yet we have no idea of it at all.

The being then of substance being safe and secure, notwithstanding any thing I have said, let us see whether the idea of it be not so too. Your lordship asks, with concern, And is this all, indeed, that is to be said for the being (if your lordship please, let it be the idea) of substance, that we accustom ourselves to suppose a substratum? Is that custom grounded upon true reason or no? I have said that it is grounded upon this,* ‘That we cannot conceive how simple ideas of sensible qualities should subsist alone; and therefore we suppose them to exist in, and to be supported by some common subject; which support we denote by the name substance.’ Which, I think, is a true reason, because it is the same your lordship grounds the supposition of a substratum on, in this very page; even on the repugnancy to our conceptions, that modes and accidents should subsist by themselves. So that I have the good luck to agree here with your lordship: and consequently conclude, I have your approbation in this, that the substratum to modes or accidents, which is our idea of substance in general, is founded in this, ‘that we cannot conceive how modes or accidents can subsist by themselves.’

* B. 2. C. 23. § 4.

ing to the true import of the word, is in plain English, standing under or upholding.*

§ 3. An obscure and relative idea of substance in general being thus made, we come to have the ideas of particular sorts of substances, by collecting such combinations of simple ideas, as are by experience and observation of men's senses taken notice of to exist together, and are therefore supposed to flow from the particular internal constitution,

* From this paragraph, there hath been raised an objection by the bishop of Worcester, as if our author's doctrine here concerning ideas, had almost discarded substance out of the world: his words in this paragraph, being brought to prove, that he is one of the gentlemen of this new way of reasoning, that have almost discarded substance out of the reasonable part of the world. To which our author replies: * This, my lord, is an accusation which your lordship will pardon me, if I do not readily know what to plead to, because I do not understand what it is almost to discard substance out of the reasonable part of the world. If your lordship means by it, that I deny, or doubt, that there is in the world any such thing as substance, that your lordship will acquit me of, when your lordship looks again into this 23d chapter of the second book, which you have cited more than once; where you will find these words, § 4. 'When we talk or think of any particular sort of corporeal substances, as horse, stone, &c. though the idea we have of either of them, be but the complication or collection of those several simple ideas of sensible qualities, which we use to find united in the thing called horse, or stone; yet, because we cannot conceive how they should subsist alone, nor one in another, we suppose them existing in, and supported by some common subject, which support we denote by the name substance; though it is certain, we have no clear or distinct idea of that thing we suppose a support.' And again, § 5. 'The same happens concerning the operations of the mind, viz. thinking, reasoning, fearing, &c. which we considering not to subsist of themselves, nor apprehending how they can belong to body, or be produced by it, we are apt to think these the actions of some other substance, which we call spirit: whereby yet it is evident, that having no other idea or notion of matter, but something wherein those many sensible qualities, which affect our senses, do subsist, by supposing a substance, wherein thinking, knowing, doubting, and a power of moving, &c. do subsist, we have as clear a notion of the nature or substance of spirit, as we have of body; the one being supposed to be (without knowing what it is) the substratum to those simple ideas we have from

* In his first letter to that bishop.

or unknown essence of that substance. Thus we come to have the ideas of a man, horse, gold, water, &c. of which substances, whether any one has any other clear idea, farther than of certain simple ideas co-existent together, I appeal to every man's own experience. It is the ordinary qualities observable in iron, or a diamond, put together, that make the true complex idea of those substances, which a smith or a jeweller commonly knows better than a philosopher; who, whatever

‘ without: and the other supposed (with a like ignorance of what it is) to be the substratum to those operations, which we experiment in ourselves within.’ And again, § 6. ‘ Whatever therefore be the secret nature of substance in general, all the ideas we have of particular distinct substances, are nothing but several combinations of simple ideas, co-existing in such, though unknown cause of their union, as makes the whole subsist of itself.’ And I farther say in the same section, ‘ that we suppose these combinations to rest in, and to be adherent to that unknown common subject, which inheres not in any thing else.’ And § 3. ‘ That our complex ideas of substances, besides all those simple ideas they are made up of, have always the confused idea of something to which they belong, and in which they subsist; and therefore when we speak of any sort of substance, we say it is a thing having such and such qualities; as body is a thing that is extended, figured, and capable of motion; spirit, a thing capable of thinking.

‘ These, and the like fashions of speaking, intimate, that the substance is supposed always something besides the extension, figure, solidity, motion, thinking, or other observable idea, though we know not what it is.’

‘ Our idea of body, I say, * is an extended solid substance; and our idea of soul, is of a substance that thinks.’ So that as long as there is any such thing as body or spirit in the world, I have done nothing towards the discarding substance out of the reasonable part of the world. Nay, as long as there is any simple idea or sensible quality left, according to my way of arguing, substance cannot be discarded; because all simple ideas, all sensible qualities, carry with them a supposition of a substratum to exist in, and of a substance wherein they inhere: and of this that whole chapter is so full, that I challenge any one who reads it, to think I have almost, or one jot, discarded substance out of the reasonable part of the world. And of this, man, horse, sun, water, iron, diamond, &c. which I have mentioned of distinct sorts of substances, will be my witnesses, as long as any such things remain in being; of which I say, † ‘ That the ideas of substances are such combinations of simple ideas as are taken to repre-

* B 2. C. 23. § 22.

† B. 2. C. 12. § 6.

substantial forms he may talk of, has no other idea of those substances, than what is framed by a collection of those simple ideas which are to be found in them; only we must take notice, that our complex ideas of substances, besides all those simple ideas they are made up of, have always the confused idea of something to which they belong, and in which they subsist. And therefore, when we speak of any sort of substance, we say it is a thing having such or such qualities: as

‘sent distinct particular things subsisting by themselves, in which the supposed or confused idea of substance is always the first and chief.’

If, by almost discarding substance out of the reasonable part of the world, your lordship means, that I have destroyed, and almost discarded the true idea we have of it, by calling it a substratum,* a supposition of we know not what support of such qualities as are capable of producing simple ideas in us, an obscure and relative idea.† That without knowing what it is, it is that which supports accidents: so that of substance we have no idea of what it is, but only a confused, obscure one of what it does: I must confess, this and the like I have said of our idea of substance: and should be very glad to be convinced by your lordship, or any body else, that I have spoken too meanly of it. He that would show me a more clear and distinct idea of substance, would do me a kindness I should thank him for. But this is the best I can hitherto find, either in my own thoughts, or in the books of logicians: for their account or idea of it is, that it is *ens*, or *res per se subsistens*, & *substantia accidentibus*; which in effect is no more, but that substance is a being or thing; or, in short, something, they know not what, or of which they have no clearer idea, than that it is something which supports accidents, or other simple ideas or modes, and is not supported itself, as a mode, or an accident. So that I do not see but *Burgersdicius*, *Sanderson*, and the whole tribe of logicians, must be reckoned by the gentlemen of this new way of reasoning, who have almost discarded substance out of the reasonable part of the world.

But supposing, my lord, that I, or these gentlemen, logicians of note in the schools, should own that we have a very imperfect, obscure, inadequate idea of substance, would it not be a little too hard to charge us with discarding substance out of the world? For what almost discarding, and reasonable part of the world, signifies, I must confess I do not clearly comprehend: but let almost and reasonable part signify here what they will, for I dare say your lordship meant something by them; would not your lordship think you were a little hardly dealt with, if, for acknowledging yourself to have a very imperfect and inadequate idea of God, or of several other things which in this very

* B. 2. C. 23. § 1. § 2. § 3. † B. 2. C. 13. § 19.

body is a thing that is extended, figured, and capable of motion; spirit, a thing capable of thinking; and so hardness, friability, and power to draw iron, we say, are qualities to be found in a loadstone. These, and the like fashions of speaking, intimate, that the substance is supposed always something besides the extension, figure, solidity, motion, thinking, or other observable ideas, though we know not what it is.

§ 4. Hence, when we talk or think of ^{No clear idea} any particualar sort of corporeal substances, ^{of substance} as horse, stone, &c. though the idea we in general.

treatise you confess our understandings come short in, and cannot comprehend, you should be accused to be one of these gentlemen that have almost discarded God, or those other mysterious things, whereof you contend we have very imperfect and inadequate ideas, out of the reasonable world? For I suppose your lordship means by almost discarding out of the reasonable world, something that is blameable, for it seems not to be inserted for a commendation; and yet I think he deserves no blame, who owns the having imperfect, inadequate, obscure ideas, where he has no better; however, if it be inferred from thence, that either he almost excludes those things out of being, or out of rational discourse, if that be meant by the reasonable world; for the first of these will not hold, because the being of things in the world depends not on our ideas: the latter indeed is true in some degree, but it is no fault: for it is certain, that where we have imperfect, inadequate, confused, obscure ideas, we cannot discourse and reason about those things so well, fully, and clearly, as if we had perfect, adequate, clear, and distinct ideas.

Other objections are made against the following parts of this paragraph by that reverend prelate, viz. The repetition of the story of the Indian philosopher, and the talking like children about substance: to which our author replies:

Your lordship, I must own, with great reason, takes notice that I paralleled more than once our idea of substance with the Indian philosopher's he-knew-not-what, which supported the tortoise, &c.

This repetition is, I confess, a fault in exact writing: but I have acknowledged and excused it in these words in my preface: 'I am not ignorant how little I herein consult my own reputation, when I knowingly let my essay go with a fault so apt to disgust the most judicious, who are always the nicest readers.' And there farther add, 'That I did not publish my essay for such great masters of knowledge as your lordship; but fitted it to men of my own size, to whom repetitions might be sometimes useful.' It would not therefore have been beside your lordship's generosity (who were not intended to be provoked by this repetition) to have passed by such a fault as this, in one who pretends not beyond the lower rank of writers. But I see

have of either of them be but the complication or collection of those several simple ideas of sensible qualities, which we used to find united in the thing called horse or stone; yet because we cannot conceive how they should subsist alone, or one in another, we suppose them existing in and supported by some common subject; which support we denote by the name substance, though it be certain we have no clear or distinct idea of that thing we suppose a support.

As clear an idea of spirit as body. § 5. The same thing happens concerning the operations of the mind, viz. thinking, reasoning, fearing, &c. which we con-

your lordship would have me exact, and without any faults; and I wish I could be so, the better to deserve your lordship's approbation.

My saying, 'That when we talk of substance, we talk like children; who being asked a question about something which they know not, readily give this satisfactory answer, That it is something:' your lordship seems mightily to lay to heart in these words that follow; If this be the truth of the case, we must still talk like children, and I know not how it can be remedied. For if we cannot come at a rational idea of substance, we can have no principle of certainty to go upon in this debate.

If your lordship has any better and distincter idea of substance than mine is, which I have given an account of, your lordship is not at all concerned in what I have there said. But those whose idea of substance, whether a rational or not rational idea, is like mine, something, they know not what, must in that, with me, talk like children, when they speak of something, they know not what. For a philosopher that says, That which supports accidents, is something, he knows not what; and a countryman that says, the foundation of the great church at Harlem is supported by something, he knows not what; and a child that stands in the dark upon his mother's muff, and says he stands upon something, he knows not what, in this respect talk all three alike. But if the countryman knows, that the foundation of the church of Harlem is supported by a rock, as the houses about Bristol are; or by gravel, as the houses about London are; or by wooden piles, as the houses in Amsterdam are; it is plain, that then having a clear and distinct idea of the thing that supports the church, he does not talk of this matter as a child; nor will he of the support of accidents, when he has a clearer and more distinct idea of it, than that it is barely something. But as long as we think like children, in cases where our ideas are no clearer nor distincter than theirs, I agree with your lordship, that I know not how it can be remedied, but that we must talk like them.

Farther, the bishop asks, Whether there be no difference between the bare being of a thing, and its subsistence by itself? To which

cluding not to subsist of themselves, nor apprehending how they can belong to any body, or be produced by it, we are apt to think these the actions of some other substance, which we call spirit; whereby yet it is evident, that having no other idea or notion of matter, but something wherein those many sensible qualities which affect our senses do subsist; by supposing a substance, wherein thinking, knowing, doubting, and a power of moving, &c. do subsist, we have as clear a notion of the substance of spirit, as we have of body: the one being supposed to be (without knowing what

our author answers, Yes*. But what will that do to prove, that upon my principles, we can come to no certainty of reason, that there is any such thing as substance? You seem by this question to conclude, That the idea of a thing that subsists by itself, is a clear and distinct idea of substance; but I beg leave to ask, Is the idea of the manner of subsistence of a thing, the idea of the thing itself? If it be not, we may have a clear and distinct idea of the manner, and yet have none but a very obscure and confused one of the thing. For example; I tell your lordship, that I know a thing that cannot subsist without a support, and I know another thing that does subsist without a support, and say no more of them; can you, by having the clear and distinct ideas of having a support, and not having a support, say, that you have a clear and distinct idea of the thing that I know which has, and of the thing that I know which has not a support? If your lordship can, I beseech you to give me the clear and distinct ideas of these, which I only call by the general name, things, that have or have not supports: for such there are, and such I shall give your lordship clear and distinct ideas of, when you shall please to call upon me for them; though I think your lordship will scarce find them by the general and confused idea of things, nor in the clearer and more distinct idea of having or not having a support.

To show a blind man, that he has no clear and distinct idea of scarlet, I tell him, that his notion of it, that it is a thing or being, does not prove he has any clear or distinct idea of it; but barely that he takes it to be something, he knows not what. He replies, That he knows more than that, v. g. he knows that it subsists, or inheres in another thing; and is there no difference, says he, in your lordship's words, between the bare being of a thing, and its subsistence in another? Yes, say I to him, a great deal, they are very different ideas. But for all that, you have no clear and distinct idea of scarlet, nor such a one as I have, who see and know it, and have another kind of idea of it, besides that of inherence.

Your lordship has the idea of subsisting by itself, and therefore you conclude you have a clear and distinct idea of the thing that subsists by

* Mr. Locke's 3d letter.

it is) the substratum to those simple ideas we have from without; and the other supposed (with a like ignorance of what it is) to be the substratum to those operations we experiment in ourselves within. It is plain then, that the idea of corporeal substance in matter is as remote from our conceptions and apprehensions, as that of spiritual substance or spirit; and therefore from our not having any notion of the substance of spirit, we can no more conclude its non-existence, than we can for the same reason deny the existence of body; it being as rational to affirm there is no body, because we have no clear and distinct idea of the substance of matter, as to say there is no spirit, because we have no clear and distinct idea of the substance of a spirit.

Of the sorts
of sub-
stances.

§ 6. Whatever therefore be the secret, abstract nature of substance in general, all the ideas we have of particular distinct sorts of substances, are *nothing but several combinations of simple ideas, co-existing in such, though unknown, cause of their union, as make the whole subsist of itself.* It is by such combinations of simple ideas, and nothing else, that we represent particular sorts of substances to ourselves: such are the ideas we have of their several species in our minds; and such only do we, by their specific names, signify to others, v. g. man, horse, sun, water, iron: upon hearing which words, every one who understands the language, frames in his mind a combination of those several simple ideas, which he has usually observed, or fancied to exist to-

itself; which, methinks, is all one, as if your countryman should say, he hath an idea of a cedar of Lebanon, that it is a tree of a nature to need no prop to lean on for its support; therefore he hath a clear and distinct idea of a cedar of Lebanon; which clear and distinct idea, when he comes to examine, is nothing but a general one of a tree, with which his indetermined idea of a cedar is confounded. Just so is the idea of substance; which, however called clear and distinct, is confounded with the general indetermined idea of something. But suppose that the manner of subsisting by itself gives us a clear and distinct idea of substance, how does that prove, That upon my principles we can come to no certainty of reason, that there is any such thing as substance in the world? Which is the proposition to be proved.

gether under that denomination ; all which he supposes to rest in, and be as it were adherent to that unknown common subject, which inheres not in any thing else. Though in the mean time it be manifest, and every one upon inquiry into his own thoughts will find, that he has no other idea of any substance, v. g. let it be gold, horse, iron, man, vitriol, bread, but what he has barely of those sensible qualities, which he supposes to inhere, with a supposition of such a substratum, as gives, as it were, a support to those qualities or simple ideas, which he has observed to exist united together. Thus the idea of the sun, what is it but an aggregate of those several simple ideas, bright, hot, roundish, having a constant regular motion, at a certain distance from us, and perhaps some other ? As he who thinks and discourses of the sun, has been more or less accurate in observing those sensible qualities, ideas, or properties, which are in that thing which he calls the sun.

§ 7. For he has the perfectest idea of any of the particular sorts of substances, who has gathered and put together most of those simple ideas which do exist in it, among which are to be reckoned its active powers, and passive capacities ; which though not simple ideas, yet in this respect, for brevity sake, may conveniently enough be reckoned amongst them. Thus the power of drawing iron, is one of the ideas of the complex one of that substance we call a load-stone ; and a power to be so drawn is a part of the complex one we call iron : which powers pass for inherent qualities in those subjects. Because every substance, being as apt, by the powers we observe in it, to change some sensible qualities in other subjects, as it is to produce in us those simple ideas which we receive immediately from it, does, by those new sensible qualities introduced into other subjects, discover to us those powers, which do thereby immediately affect our senses, as regularly as its sensible qualities do it immediately : v. g. we immediately by our senses perceive in fire its heat and colour ; which are, if rightly considered, no-

Power a great part of our complex ideas of substances.

thing but powers in it to produce those ideas in us: we also by our senses perceive the colour and brittleness of charcoal, whereby we come by the knowledge of another power in fire, which it has to change the colour and consistency of wood. By the former, fire immediately, by the latter it mediately discovers to us these several qualities, which therefore we look upon to be a part of the qualities of fire, and so make them a part of the complex idea of it. For all those powers that we take cognizance of, terminating only in the alteration of some sensible qualities in those subjects on which they operate, and so making them exhibit to us new sensible ideas; therefore it is that I have reckoned these powers amongst the simple ideas, which make the complex ones of the sorts of substances; though these powers, considered in themselves, are truly complex ideas. And in this looser sense I crave leave to be understood, when I name any of these potentialities among the simple ideas, which we recollect in our minds when we think of particular substances. For the powers that are severally in them are necessary to be considered, if we will have true distinct notions of the several sorts of substances.

And why. § 8. Nor are we to wonder, that powers make a great part of our complex ideas of substances: since their secondary qualities are those, which in most of them serve principally to distinguish substances one from another, and commonly make a considerable part of the complex idea of the several sorts of them. For our senses failing us in the discovery of the bulk, texture, and figure of the minute parts of bodies, on which their real constitutions and differences depend, we are fain to make use of their secondary qualities, as the characteristical notes and marks, whereby to frame ideas of them in our minds, and distinguish them one from another. All which secondary qualities, as has been shown, are nothing but bare powers. For the colour and taste of opium are, as well as its soporific or anodyne virtues, mere powers depending on its primary qualities, whereby it is

fitted to produce different operations on different parts of our bodies.

§ 9. The ideas that make our complex ones of corporeal substances, are of these three sorts. First, the ideas of the primary qualities of things which are discovered by our senses, and are in them even when we perceive them not; such are the bulk, figure, number, situation, and motion of the parts of bodies, which are really in them, whether we take notice of them or no. Secondly, the sensible secondary qualities, which depending on these, are nothing but the powers those substances have to produce several ideas in us by our senses; which ideas are not in the things themselves, otherwise than as any thing is in its cause. Thirdly, the aptness we consider in any substance to give or receive such alterations of primary qualities, as that the substance so altered should produce in us different ideas from what it did before; these are called active and passive powers: all which powers, as far as we have any notice or notion of them, terminate only in sensible simple ideas. For whatever alteration a loadstone has the power to make in the minute particles of iron, we should have no notion of any power it had at all to operate on iron, did not its sensible motion discover it: and I doubt not, but there are a thousand changes, that bodies we daily handle have a power to cause in one another, which we never suspect, because they never appear in sensible effects.

§ 10. Powers therefore justly make a great part of our complex ideas of substances. He that will examine his complex idea of gold, will find several of its ideas that make it up to be only powers: as the power of being melted, but of not spending itself in the fire; of being dissolved in aqua regia; are ideas as necessary to make up our complex idea of gold, as its colour and weight: which, if duly considered, are also nothing but different powers. For to speak truly, yellowness is not actually in gold; but is a power in gold to produce that idea in us by our eyes, when placed in

a due light : and the heat, which we cannot leave out of our ideas of the sun, is no more really in the sun, than the white colour it introduces into wax. These are both equally powers in the sun, operating, by the motion and figure of its sensible parts, so on a man, as to make him have the idea of heat ; and so on wax, as to make it capable to produce in a man the idea of white.

The now secondary qualities of bodies would disappear, if we could discover the primary ones of their minute parts.

§ 11. Had we senses acute enough to discern the minute particles of bodies, and the real constitution on which their sensible qualities depend, I doubt not but they would produce quite different ideas in us ; and that which is now the yellow colour of gold, would then disappear, and instead of it we should see an admirable texture of parts of a certain size and figure. This microscopes plainly discover to us ; for what to our naked eyes produces a certain colour, is, by thus augmenting the acuteness of our senses, discovered to be quite a different thing ; and the thus altering, as it were, the proportion of the bulk of the minute parts of a coloured object to our usual sight, produces different ideas from what it did before. Thus sand or pounded glass, which is opaque, and white to the naked eye, is pellucid in a microscope ; and a hair seen this way, loses its former colour, and is in a great measure pellucid, with a mixture of some bright sparkling colours, such as appear from the refraction of diamonds, and other pellucid bodies. Blood to the naked eye appears all red ; but by a good microscope, wherein its lesser parts appear, shows only some few globules of red, swimming in a pellucid liquor : and how these red globules would appear, if glasses could be found that could yet magnify them a thousand or ten thousand times more, is uncertain.

Our faculties of discovery suited to our state.

§ 12. The infinitely wise contriver of us, and all things about us, hath fitted our senses, faculties, and organs, to the conveniences of life, and the business we have to do here. We are able, by our senses, to know and distinguish things ; and to examine them so far, as to

apply them to our uses, and several ways to accommodate the exigencies of this life. We have insight enough into their admirable contrivances and wonderful effects, to admire and magnify the wisdom, power, and goodness of their author. Such a knowledge as this, which is suited to our present condition, we want not faculties to attain. But it appears not, that God intended we should have a perfect, clear, and adequate knowledge of them : that perhaps is not in the comprehension of any finite being. We are furnished with faculties (dull and weak as they are) to discover enough in the creatures, to lead us to the knowledge of the Creator, and the knowledge of our duty : and we are fitted well enough with abilities to provide for the conveniences of living : these are our business in this world. But were our senses altered, and made much quicker and acuter, the appearance and outward scheme of things would have quite another face to us ; and, I am apt to think, would be inconsistent with our being, or at least well-being, in this part of the universe which we inhabit. He that considers how little our constitution is able to bear a remove into parts of this air, not much higher than that we commonly breathe in, will have reason to be satisfied, that in this globe of earth allotted for our mansion, the all-wise Architect has suited our organs, and the bodies that are to affect them, one to another. If our sense of hearing were but one thousand times quicker than it is, how would a perpetual noise distract us ? And we should in the quietest retirement be less able to sleep or meditate, than in the middle of a sea-fight. Nay, if that most instructive of our senses, seeing, were in any man a thousand or a hundred thousand times more acute than it is by the best microscope, things several millions of times less than the smallest object of his sight now, would then be visible to his naked eyes, and so he would come nearer to the discovery of the texture and motion of the minute parts of corporeal things ; and in many of them, probably get ideas of their internal constitutions. But then he would be in a quite different world from other people : nothing would appear

the same to him, and others; the visible ideas of every thing would be different. So that I doubt, whether he and the rest of men could discourse concerning the objects of sight, or have any communication about colours, their appearances being so wholly different. And perhaps such a quickness and tenderness of sight could not endure bright sun-shine, or so much as open day-light; nor take in but a very small part of any object at once, and that too only at a very near distance. And if, by the help of such microscopical eyes (if I may so call them), a man could penetrate farther than ordinary into the secret composition and radical texture of bodies, he would not make any great advantage by the change, if such an acute sight would not serve to conduct him to the market and exchange; if he could not see things he was to avoid, at a convenient distance; nor distinguish things he had to do with, by those sensible qualities others do. He that was sharp-sighted enough to see the configuration of the minute particles of the spring of a clock, and observe upon what peculiar structure and impulse its elastic motion depends, would no doubt discover something very admirable: but if eyes so framed could not view at once the hand, and the characters of the hour-plate, and thereby at a distance see what o'clock it was, their owner could not be much benefited by that acuteness; which, whilst it discovered the secret contrivance of the parts of the machine, made him lose its use.

Conjecture § 13. And here give me leave to pro-
about spi- pose an extravagant conjecture of mine,
rits. viz. that since we have some reason (if there
be any credit to be given to the report of things, that
our philosophy cannot account for) to imagine, that
spirits can assume to themselves bodies of different bulk,
figure, and conformation of parts; whether one great
advantage some of them have over us, may not lie in
this, that they can so frame and shape to themselves
organs of sensation or perception, as to suit them to
their present design, and the circumstances of the ob-
ject they would consider. For how much would that
man exceed all others in knowledge, who had but the

faculty so to alter the structure of his eyes, that one sense, as to make it capable of all the several degrees of vision which the assistance of glasses (casually at first lighted on) has taught us to conceive? What wonders would he discover, who could so fit his eyes to all sorts of objects, as to see, when he pleased, the figure and motion of the minute particles in the blood, and other juices of animals, as distinctly as he does, at other times, the shape and motion of the animals themselves? But to us, in our present state, unalterable organs so contrived, as to discover the figure and motion of the minute parts of bodies, whereon depend those sensible qualities we now observe in them, would perhaps be of no advantage. God has, no doubt, made them so, as is best for us in our present condition. He hath fitted us for the neighbourhood of the bodies that surround us, and we have to do with: and though we cannot, by the faculties we have, attain to a perfect knowledge of things, yet they will serve us well enough for those ends above-mentioned, which are our great concernment. I beg my reader's pardon for laying before him so wild a fancy, concerning the ways of perception in beings above us; but how extravagant soever it be, I doubt whether we can imagine any thing about the knowledge of angels, but after this manner, some way or other in proportion ^{to} what we find and observe in ourselves. And though we cannot but allow that the infinite power and wisdom of God may frame creatures with a thousand other faculties and ways of perceiving things without them, than what we have: yet our thoughts can go no farther than our own: so impossible it is for us to enlarge our very guesses beyond the ideas received from our own sensation and reflection. The supposition at least, that angels do sometimes assume bodies, needs not startle us; since some of the most ancient and most learned fathers of the church seemed to believe, that they had bodies: and this is certain, that their state and way of existence is unknown to us.

§ 14. But to return to the matter in ^{Complex} hand, the ideas we have of substances, and ^{ideas of sub-} the ways we come by them; I say, our spe- ^{stances.}

cific ideas of substances are nothing else but a collection of a certain number of simple ideas, considered as united in one thing. These ideas of substances, though they are commonly simple apprehensions, and the names of them simple terms; yet in effect are complex and compounded. Thus the idea which an Englishman signifies by the name *Swan*, is white colour, long neck, red beak, black legs, and whole feet, and all these of a certain size, with a power of swimming in the water, and making a certain kind of noise: and perhaps, to a man who has long observed this kind of birds, some other properties which all terminate in sensible simple ideas, all united in one common subject.

Idea of spir- § 15. Besides the complex ideas we have
itual sub- of material sensible substances, of which I
stances as of have last spoken, by the simple ideas we
clear as of have taken from those operations of our own
bodily sub- minds, which we experiment daily in our-
stances. selves, as thinking, understanding, willing, knowing,
and power of beginning motion, &c. co-existing in some
substance: we are able to frame the complex idea of
an immaterial spirit. And thus by putting together
the ideas of thinking, perceiving, liberty, and power of
moving themselves, and other things, we have as clear
a perception and notion of immaterial substances, as we
have of material. For putting together the ideas of
thinking and willing, or the power of moving or quieting
corporeal motion, joined to substance of which we have
no distinct idea, we have the idea of an immaterial spi-
rit; and by putting together the ideas of coherent solid
parts, and a power of being moved, joined with sub-
stance, of which likewise we have no positive idea, we
have the idea of matter. The one is as clear and dis-
tinct an idea as the other: the idea of thinking, and
moving a body, being as clear and distinct ideas, as the
ideas of extension, solidity, and being moved. For our
idea of substance is equally obscure, or none at all in
both: it is but a supposed I know not what, to support
those ideas we call accidents. It is for want of reflec-
tion that we are apt to think, that our senses show us
nothing but material things. Every act of sensation,

when duly considered, gives us an equal view of both parts of nature, the corporeal and spiritual. For whilst I know, by seeing or hearing, &c. that there is some corporeal being without me, the object of that sensation; I do more certainly know, that there is some spiritual being within me, that sees and hears. This, I must be convinced, cannot be the action of bare insensible matter; nor ever could be, without an immaterial thinking being.

§ 16. By the complex idea of extended, No idea of figured, coloured, and all other sensible qua- abstract sub-
 lities, which is all that we know of it, we stance.
 are as far from the idea of the substance of body, as if we knew nothing at all: nor after all the acquaintance and familiarity, which we imagine we have with matter, and the many qualities men assure themselves they perceive and know in bodies, will it perhaps upon examination be found that they have any more, or clearer, primary ideas belonging to body, than they have belonging to immaterial spirit.

§ 17. The primary ideas we have pecu- The cohesion
 liar to body, as contradistinguished to spirit, of solid parts
 are the cohesion of solid, and consequently and impulse
 separable, parts, and a power of communicating the primary
 motion by impulse. These, I think, are the body.
 original ideas proper and peculiar to body; for figure is but the consequence of finite extension.

§ 18. The ideas we have belonging, and Thinking
 peculiar to spirit, are thinking and will, or a and moti-
 power of putting body into motion by thought, ty the pri-
 and which is consequent to it, liberty. For mary ideas
 of spirit.
 as body cannot but communicate its motion by impulse to another body, which it meets with at rest; so the mind can put bodies into motion, or forbear to do so, as it pleases. The ideas of existence, duration, and mobility, are common to them both.

§ 19. There is no reason why it should Spirits capa-
 be thought strange, that I make mobi- ble of mo-
 lity belong to spirit: for having no other tion.
 idea of motion, but change of distance with other be-

ings that are considered as at rest; and finding, that spirits, as well as bodies, cannot operate but where they are, and that spirits do operate at several times in several places; I cannot but attribute change of place to all finite spirits; (for of the infinite spirit I speak not here.) For my soul being a real being, as well as my body, is certainly as capable of changing distance with any other body, or being, as body itself; and so is capable of motion. And if a mathematician can consider a certain distance, or a change of that distance between two points, one may certainly conceive a distance, and a change of distance between two spirits: and so conceive their motion, their approach or removal, one from another.

§ 20. Every one finds in himself, that his soul can think, will, and operate on his body in the place where that is; but cannot operate on a body, or in a place an hundred miles distant from it. Nobody can imagine that his soul can think, or move a body at Oxford, whilst he is at London; and cannot but know, that, being united to his body, it constantly changes place all the whole journey between Oxford and London, as the coach or horse does that carries him, and I think may be said to be truly all that while in motion; or if that will not be allowed to afford us a clear idea enough of its motion, its being separated from the body in death, I think, will; for to consider it as going out of the body, or leaving it, and yet to have no idea of its motion, seems to me impossible.

§ 21. If it be said by any one, that it cannot change place, because it hath none, for the spirits are not in loco, but ubi; I suppose that way of talking will not now be of much weight to many, in an age that is not much disposed to admire, or suffer themselves to be deceived by such unintelligible ways of speaking. But if any one thinks there is any sense in that distinction, and that it is applicable to our present purpose, I desire him to put it into intelligible English; and then from thence draw a reason to show, that immaterial spirits are not capable of motion. Indeed motion cannot be

attributed to God; not because he is an immaterial, but because he is an infinite spirit.

§ 22. Let us compare then our complex idea of an immaterial spirit with our complex idea of body, and see whether there be any more obscurity in one than in the other, and in which most. Our idea of body, as I think, is an extended solid substance, capable of communicating motion by impulse: and our idea of soul, as an immaterial spirit, is of a substance that thinks, and has a power of exciting motion in body, by willing or thought. These, I think, are our complex ideas of soul and body, as contra-distinguished; and now let us examine which has most obscurity in it, and difficulty to be apprehended. I know, that people, whose thoughts are immersed in matter, and have so subjected their minds to their senses, that they seldom reflect on any thing beyond them, are apt to say, they cannot comprehend a thinking thing, which perhaps is true: but I affirm, when they consider it well, they can no more comprehend an extended thing.

§ 23. If any one say, he knows not what it is thinks in him; he means, he knows not what the substance is of that thinking thing: no more, say I, knows he what the substance is of that solid thing. Farther, if he says he knows not how he thinks: I answer, neither knows he how he is extended; how the solid parts of body are united, or cohere together to make extension. For though the pressure of the particles of air may account for the cohesion of several parts of matter, that are grosser than the particles of air, and have pores less than the corpuscles of air; yet the weight, or pressure of the air, will not explain, nor can be a cause of the coherence of the particles of air themselves. And if the pressure of the æther, or any subtiler matter than the air, may unite, and hold fast together the parts of a particle of air, as well as other bodies; yet it cannot make bonds for itself, and hold together the parts that make up every the least corpuscle of that materia

Idea of soul
and body
compared.

Cohesion of
solid parts in
body as hard
to be con-
ceived as
thinking in
a soul.

subtilis. So that the hypothesis, how ingeniously soever explained, by showing, that the parts of sensible bodies are held together by the pressure of other external insensible bodies, reaches not the parts of the æther itself; and by how much the more evident it proves, that the parts of other bodies are held together by the external pressure of the æther, and can have no other conceivable cause of their cohesion and union, by so much the more it leaves us in the dark concerning the cohesion of the parts of the corpuscles of the æther itself; which we can neither conceive without parts, they being bodies, and divisible; nor yet how their parts cohere, they wanting that cause of cohesion, which is given of the cohesion of the parts of all other bodies.

§ 24. But, in truth, the pressure of any ambient fluid, how great soever, can be no intelligible cause of the cohesion of the solid parts of matter. For though such a pressure may hinder the avulsion of two polished superficies, one from another, in a line perpendicular to them, as in the experiment of two polished marbles; yet it can never, in the least, hinder the separation by a motion, in a line parallel to those surfaces. Because the ambient fluid, having a full liberty to succeed in each point of space, deserted by a lateral motion, resists such a motion of bodies so joined, no more than it would resist the motion of that body, were it on all sides environed by that fluid, and touched no other body: and therefore, if there were no other cause of cohesion, all parts of bodies must be easily separable by such a lateral sliding motion. For if the pressure of the æther be the adequate cause of cohesion, wherever that cause operates not, there can be no cohesion. And since it cannot operate against such a lateral separation, (as has been shown) therefore in every imaginary plane, intersecting any mass of matter, there could be no more cohesion, than of two polished surfaces, which will always, notwithstanding any imaginable pressure of a fluid, easily slide one from another. So that, perhaps, how clear an idea soever we think we have of the extension of body, which is nothing but the cohesion of

solid parts, he that shall well consider it in his mind, may have reason to conclude, that it is as easy for him to have a clear idea, how the soul thinks, as how body is extended. For since body is no farther, nor otherwise extended, than by the union and cohesion of its solid parts, we shall very ill comprehend the extension of body, without understanding wherein consists the union and cohesion of its parts: which seems to me as incomprehensible, as the manner of thinking, and how it is performed.

§ 25. I allow it is usual for most people to wonder how any one should find a difficulty in what they think they every day observe. Do we not see, will they be ready to say, the parts of bodies stick firmly together? Is there any thing more common? And what doubt can there be made of it? And the like, I say, concerning thinking and voluntary motion: Do we not every moment experiment it in ourselves? and therefore can it be doubted? The matter of fact is clear, I confess; but when we would a little nearer look into it, and consider how it is done, there I think we are at a loss, both in the one, and the other; and can as little understand how the parts of body cohere, as how we ourselves perceive, or move. I would have any one intelligibly explain to me, how the parts of gold, or brass, (that but now in fusion were as loose from one another, as the particles of water, or the sands of an hour-glass) come in a few moments to be so united, and adhere so strongly one to another, that the utmost force of men's arms cannot separate them: a considering man will, I suppose, be here at a loss, to satisfy his own, or another man's understanding.

§ 26. The little bodies that compose that fluid we call water, are so extremely small, that I have never heard of any one, who by a microscope (and yet I have heard of some that have magnified to ten thousand; nay, to much above a hundred thousand times) pretended to perceive their distinct bulk, figure, or motion: and the particles of water are also so perfectly loose one from another, that the least force sensibly

separates them. Nay, if we consider their perpetual motion, we must allow them to have no cohesion one with another; and yet let but a sharp cold come, they unite, they consolidate, these little atoms cohere, and are not, without great force, separable. He that could find the bonds that tie these heaps of loose little bodies together so firmly; he that could make known the cement that makes them stick so fast one to another; would discover a great, and yet unknown secret: and yet when that was done, would he be far enough from making the extension of body (which is the cohesion of its solid parts) intelligible, till he could show wherein consisted the union, or consolidation of the parts of those bonds, or of that cement, or of the least particle of matter that exists. Whereby it appears, that this primary and supposed obvious quality of body will be found, when examined, to be as incomprehensible as any thing belonging to our minds, and a solid extended substance as hard to be conceived as a thinking immaterial one, whatever difficulties some would raise against it.

§ 27. For, to extend our thoughts a little farther, that pressure, which is brought to explain the cohesion of bodies, is as unintelligible as the cohesion itself. For if matter be considered, as no doubt it is, finite, let any one send his contemplation to the extremities of the universe, and there see what conceivable hoops, what bond he can imagine to hold this mass of matter in so close a pressure together; from whence steel has its firmness, and the parts of a diamond their hardness and indissolubility. If matter be finite, it must have its extremes; and there must be something to hinder it from scattering asunder. If, to avoid this difficulty, any one will throw himself into the supposition and abyss of infinite matter, let him consider what light he thereby brings to the cohesion of body, and whether he be ever the nearer making it intelligible, by resolving it into a supposition, the most absurd and most incomprehensible of all other: So far is our extension of body (which is nothing but the cohesion of solid parts) from being clearer, or more distinct, when we

would inquire into the nature, cause, or manner of it, than the idea of thinking.

§ 28. Another idea we have of body is the power of communication of motion by impulse: and of our souls, the power of exciting motion by thought. These ideas, the one of body, the other of our minds every day's experience clearly furnishes us with: but if here again we inquire how this is done, we are equally in the dark. For to the communication of motion by impulse, wherein as much motion is lost to one body as is got to the other, which is the ordinariest case, we can have no other conception, but of the passing of motion out of one body into another: which, I think, is as obscure and unconceivable, as how our minds move or stop our bodies by thought, which we every moment find they do. The increase of motion by impulse, which is observed or believed sometimes to happen, is yet harder to be understood. We have by daily experience clear evidence of motion produced both by impulse and by thought; but the manner how, hardly comes within our comprehension: we are equally at a loss in both. So that however we consider motion, and its communication, either from body or spirit, the idea which belongs to spirit is at least as clear as that which belongs to body. And if we consider the active power of moving, or, as I may call it, motivity, it is much clearer in spirit than body; since two bodies, placed by one another at rest, will never afford us the idea of a power in the one to move the other, but by a borrowed motion: whereas the mind, every day, affords us ideas of an active power of moving of bodies; and therefore it is worth our consideration, whether active power be not the proper attribute of spirits, and passive power of matter. Hence may be conjectured, that created spirits are not totally separate from matter, because they are both active and passive. Pure spirit, viz. God, is only active; pure matter is only passive; those beings that are both active and passive, we may judge to partake of both. But be that as it will, I

Communi-
cation of
motion by
impulse, or
by thought,
equally in-
telligible.

think, we have as many, and as clear ideas belonging to spirit, as we have belonging to body, the substance of each being equally unknown to us, and the idea of thinking in spirit as clear as of extension in body; and the communication of motion by thought, which we attribute to spirit, is as evident as that by impulse, which we ascribe to body. Constant experience makes us sensible of both these, though our narrow understandings can comprehend neither. For when the mind would look beyond those original ideas we have from sensation or reflection, and penetrate into their causes, and manner of production, we find still it discovers nothing but its own short-sightedness.

§ 29. To conclude; sensation convinces us, that there are solid extended substances; and reflection, that there are thinking ones: experience assures us of the existence of such beings; and that the one hath a power to move body by impulse, the other by thought; this we cannot doubt of. Experience, I say, every moment furnishes us with the clear ideas, both of the one and the other. But beyond these ideas, as received from their proper sources, our faculties will not reach. If we would inquire farther into their nature, causes, and manner, we perceive not the nature of extension clearer than we do of thinking. If we would explain them any farther, one is as easy as the other; and there is no more difficulty to conceive how a substance we know not should by thought set body into motion, than how a substance we know not should by impulse set body into motion. So that we are no more able to discover wherein the ideas belonging to body consist, than those belonging to spirit. From whence it seems probable to me, that the simple ideas we receive from sensation and reflection are the boundaries of our thoughts; beyond which the mind, whatever efforts it would make, is not able to advance one jot; nor can it make any discoveries, when it would pry into the nature and hidden causes of those ideas.

Idea of body
and spirit
compared.

§ 30. So that, in short, the idea we have of spirit, compared with the idea we have of body, stands thus: the substance of spi-

rit is unknown to us; and so is the substance of body equally unknown to us. Two primary qualities or properties of body, viz. solid coherent parts and impulse, we have distinct clear ideas of: so likewise we know, and have distinct clear ideas of two primary qualities or properties of spirit, viz. thinking and a power of action; i. e. a power of beginning or stopping several thoughts or motions. We have also the ideas of several qualities inherent in bodies, and have the clear distinct ideas of them; which qualities are but the various modifications of the extension of cohering solid parts, and their motion. We have likewise the ideas of the several modes of thinking, viz. believing, doubting, intending, fearing, hoping; all which are but the several modes of thinking. We have also the ideas of willing and moving the body consequent to it, and with the body itself too; for, as has been shown, spirit is capable of motion.

§ 31. Lastly, if this notion of immaterial spirit may have perhaps some difficulties in it not easy to be explained, we have therefore no more reason to deny or doubt the existence of such spirits than we have to deny or doubt the existence of body; because the notion of body is cumbered with some difficulties very hard, and perhaps impossible to be explained or understood by us. For I would fain have instanced any thing in our notion of spirit more perplexed, or nearer a contradiction, than the very notion of body includes in it: the divisibility in infinitum of any finite extension involving us, whether we grant or deny it, in consequences impossible to be explicated or made in our apprehensions consistent; consequences that carry greater difficulty, and more apparent absurdity, than any thing can follow from the notion of an immaterial knowing substance.

§ 32. Which we are not at all to wonder at, since we having but some few superficial ideas of things, discovered to us only by the senses from without, or by the mind, reflecting on what it experiments in itself with-

The notion of spirit involves no more difficulty in it than that of body.

We know nothing beyond our simple ideas.

in, have no knowledge beyond that, much less of the internal constitution, and true nature of things, being destitute of faculties to attain it. And therefore experimenting and discovering in ourselves knowledge, and the power of voluntary motion, as certainly as we experiment, or discover in things without us, the cohesion and separation of solid parts, which is the extension and motion of bodies; we have as much reason to be satisfied with our notion of immaterial spirit, as with our notion of body, and the existence of the one as well as the other. For it being no more a contradiction that thinking should exist, separate and independent from solidity, than it is a contradiction that solidity should exist, separate and independent from thinking, they being both but simple ideas, independent one from another; and having as clear and distinct ideas in us of thinking, as of solidity; I know not why we may not as well allow a thinking thing without solidity, i. e. immaterial, to exist; as a solid thing without thinking, i. e. matter, to exist; especially since it is not harder to conceive how thinking should exist without matter, than how matter should think. For whensoever we would proceed beyond these simple ideas we have from sensation and reflection, and dive farther into the nature of things, we fall presently into darkness and obscurity, perplexedness and difficulties; and can discover nothing farther but our own blindness and ignorance. But whichever of these complex ideas be clearest, that of body, or immaterial spirit, this is evident, that the simple ideas that make them up are no other than what we have received from sensation or reflection: and so is it of all our other ideas of substances, even of God himself.

Idea of God. § 33. For if we examine the idea we have of the incomprehensible supreme being, we shall find, that we come by it the same way; and that the complex ideas we have both of God and separate spirits are made up of the simple ideas we receive from reflection: v. g. having, from what we experiment in ourselves, got the ideas of existence and duration; of knowledge and power; of pleasure and happiness; and of several other qualities and powers,

which it is better to have than to be without: when we would frame an idea the most suitable we can to the supreme being, we enlarge every one of these with our idea of infinity; and so putting them together, make our complex idea of God. For that the mind has such a power of enlarging some of its ideas, received from sensation and reflection, has been already shown.

§ 34. If I find that I know some few things, and some of them, or all, perhaps imperfectly, I can frame an idea of knowing twice as many; which I can double again, as often as I can add to number; and thus enlarge my idea of knowledge, by extending its comprehension to all things existing, or possible. The same also I can do of knowing them more perfectly; i. e. all their qualities, powers, causes, consequences, and relations, &c. till all be perfectly known that is in them, or can any way relate to them; and thus frame the idea of infinite or boundless knowledge. The same may also be done of power, till we come to that we call infinite; and also of the duration of existence without beginning or end; and so frame the idea of an eternal being. The degrees or extent wherein we ascribe existence, power, wisdom, and all other perfections (which we can have any ideas of) to that sovereign being which we call God, being all boundless and infinite, we frame the best idea of him our minds are capable of: all which is done, I say, by enlarging those simple ideas we have taken from the operations of our own minds, by reflection: or by our senses, from exterior things; to that vastness to which infinity can extend them.

Idea of God. § 35. For it is infinity, which joined to our ideas of existence, power, knowledge, &c. makes that complex idea, whereby we represent to ourselves, the best we can, the supreme being. For though in his own essence (which certainly we do not know, not knowing the real essence of a pebble, or a fly, or of our own selves) God be simple and uncompounded; yet, I think, I may say we have no other idea of him but a complex one of existence, knowledge,

power, happiness, &c. infinite and eternal : which are all distinct ideas, and some of them, being relative, are again compounded of others ; all which being, as has been shown, originally got from sensation and reflection, go to make up the idea or notion we have of God.

§ 36. This farther is to be observed, that there is no idea we attribute to God, bating infinity, which is not also a part of our complex idea of other spirits. Because being capable of no other simple ideas, belonging to any thing but body, but those which by reflection we receive from the

operation of our own minds, we can attribute to spirits no other but what we receive from thence : and all the difference we can put between them in our contemplation of spirits, is only in the several extents and degrees of their knowledge, power, duration, happiness, &c. For that in our ideas, as well of spirits, as of other things, we are restrained to those we receive from sensation and reflection, is evident from hence, that in our ideas of spirits, how much soever advanced in perfection beyond those of bodies, even to that of infinite, we cannot yet have any idea of the manner wherein they discover their thoughts one to another : though we must necessarily conclude, that separate spirits, which are beings that have perfecter knowledge and greater happiness than we, must needs have also a perfecter way of communicating their thoughts than we have, who are fain to make use of corporeal signs and particular sounds ; which are therefore of most general use, as being the best and quickest we are capable of. But of immediate communication, having no experiment in ourselves, and consequently no notion of it at all, we have no idea how spirits, which use not words, can with quickness, or much less how spirits, that have no bodies, can be masters of their own thoughts, and communicate or conceal them at pleasure, though we cannot but necessarily suppose they have such a power.

Recapitulation. § 37. And thus we have seen, what kind of ideas we have of substances of all kinds,

wherein they consist, and how we came by them. From whence, I think, it is very evident,

First, That all our ideas of the several sorts of substances are nothing but collections of simple ideas, with a supposition of something to which they belong, and in which they subsist; though of this supposed something we have no clear distinct idea at all.

Secondly, That all the simple ideas, that thus united in one common substratum make up our complex ideas of several sorts of substances, are no other but such as we have received from sensation or reflection. So that even in those which we think we are most intimately acquainted with, and that come nearest the comprehension of our most enlarged conceptions, we cannot go beyond those simple ideas. And even in those which seem most remote from all we have to do with, and do infinitely surpass any thing we can perceive in ourselves by reflection, or discover by sensation in other things, we can attain to nothing but those simple ideas, which we originally received from sensation or reflection; as is evident in the complex ideas we have of angels, and particularly of God himself.

Thirdly, That most of the simple ideas, that make up our complex ideas of substances, when truly considered, are only powers, however we are apt to take them for positive qualities; v. g. the greatest part of the ideas that make our complex idea of gold are yellowness, great weight, ductility, fusibility and solubility in aqua regia, &c. all united together in an unknown substratum: all which ideas are nothing else but so many relations to other substances, and are not really in the gold, considered barely in itself, though they depend on those real and primary qualities of its internal constitution, whereby it has a fitness differently to operate, and be operated on by several other substances.

CHAP. XXIV.

Of collective Ideas of Substances.

One idea. § 1. BESIDES these complex ideas of several single substances, as of man, horse, gold, violet, apple, &c. the mind hath also complex collective ideas of substances; which I so call, because such ideas are made up of many particular substances considered together, as united into one idea, and which so joined are looked on as one; v. g. the idea of such a collection of men as make an army, though consisting of a great number of distinct substances, is as much one idea, as the idea of a man: and the great collective idea of all bodies whatsoever, signified by the name world, is as much one idea, as the idea of any the least particle of matter in it; it sufficing to the unity of any idea, that it be considered as one representation or picture, though made up of ever so many particulars.

Made by the power of composing in the mind. § 2. These collective ideas of substances the mind makes by its power of composition, and uniting severally either simple or complex ideas into one, as it does by the same faculty make the complex ideas of particular substances, consisting of an aggregate of divers simple ideas, united in one substance; and as the mind, by putting together the repeated ideas of unity, makes the collective mode, or complex idea of any number, as a score, or a gross, &c. so by putting together several particular substances, it makes collective ideas of substances, as a troop, an army, a swarm, a city, a fleet; each of which, every one finds, that he represents to his own mind by one idea, in one view; and so under that notion considers those several things as perfectly one, as one ship, or one atom. Nor is it harder to conceive, how an army of ten thousand men should make one idea, than how a man should make one idea: it being as easy to the mind to unite into one the idea of a great

number of men, and consider it as one, as it is to unite into one particular all the distinct ideas that make up the composition of a man, and consider them all together as one.

§ 3. Amongst such kind of collective ideas, are to be counted most part of artificial things, at least such of them as are made up of distinct substances: and, in truth, if we consider all these collective ideas aright, as army, constellation, universe, as they are united into so many single ideas, they are but the artificial draughts of the mind; bringing things very remote, and independent on one another, into one view, the better to contemplate and discourse of them, united into one conception, and signified by one name. For there are no things so remote, nor so contrary, which the mind cannot, by this art of composition, bring into one idea; as is visible in that signified by the universe.

All artificial things are collective ideas.

CHAP. XXV.

Of Relation.

§ 1. BESIDES the ideas, whether simple or complex, that the mind has of things, as they are in themselves, there are others it gets from their comparison one with another. The understanding, in the consideration of any thing, is not confined to that precise object: it can carry any idea as it were beyond itself, or at least look beyond it, to see how it stands in conformity to any other. When the mind so considers one thing, that it does as it were bring it to and set it by another, and carry its view from one to the other: this is, as the words import, relation and respect; and the denominations given to positive things, intimating that respect, and serving as marks to lead the thoughts beyond the subject itself denominated to something distinct from it, are what we call relatives: and the things, so brought

Relation
what.

together, related. Thus, when the mind considers Caius as such a positive being, it takes nothing into that idea, but what really exists in Caius; v. g. when I consider him as a man, I have nothing in my mind but the complex idea of the species, man. So likewise, when I say Caius is a white man, I have nothing but the bare consideration of a man who hath that white colour. But when I give Caius the name husband, I intimate some other person; and when I give him the name whiter, I intimate some other thing: in both cases my thought is led to something beyond Caius, and there are two things brought into consideration. And since any idea, whether simple or complex, may be the occasion why the mind thus brings two things together, and as it were takes a view of them at once, though still considered as distinct; therefore any of our ideas may be the foundation of relation. As in the above-mentioned instance, the contract and ceremony of marriage with Sempronia is the occasion of the denomination or relation of husband; and the colour white the occasion why he is said to be whiter than free-stone.

§ 2. These, and the like relations, expressed by relative terms, that have others answering them, with a reciprocal intimation, as father and son, bigger and less, cause and effect, are very obvious to every one, and every body at first sight perceives the relation. For father and son, husband and wife, and such other correlative terms, seem so nearly to belong one to another, and through custom do so readily chime and answer one another in people's memories, that, upon the naming of either of them, the thoughts are presently carried beyond the thing so named; and nobody overlooks or doubts of a relation, where it is so plainly intimated. But where languages have failed to give correlative names, there the relation is not always so easily taken notice of. Concubine is, no doubt, a relative name, as well as wife: but in languages where this, and the like words, have not a correlative term, there people are not so apt to take them

Relations
without cor-
relative
terms not
easily per-
ceived.

to be so, as wanting that evident mark of relation which is between correlatives, which seem to explain one another, and not to be able to exist, but together. Hence it is, that many of those names which, duly considered, do include evident relations, have been called external denominations. But all names, that are more than empty sounds, must signify some idea, which is either in the thing to which the name is applied, and then it is positive, and is looked on as united to, and existing in the thing to which the denomination is given: or else it arises from the respect the mind finds in it to something distinct from it, with which it considers it; and then it concludes a relation.

§ 3. Another sort of relative terms there is, which are not looked on to be either relative, or so much as external denominations; which yet, under the form and appearance of signifying something absolute in the subject, do conceal a tacit, though less observable relation. Such are the seemingly positive terms of old, great, imperfect, &c. whereof I shall have occasion to speak more at large in the following chapters.

Some seemingly absolute terms contain relations.

§ 4. This farther may be observed, that the ideas of relation may be the same in men, who have far different ideas of the things that are related, or that are thus compared; v. g. those who have far different ideas of a man, may yet agree in the notion of a father: which is a notion superinduced to the substance, or man, and refers only to an act of that thing called man, whereby he contributed to the generation of one of his own kind, let man be what it will.

Relation different from the things related.

§ 5. The nature therefore of relation consists in the referring or comparing two things one to another; from which comparison, one or both comes to be denominated. And if either of those things be removed or cease to be, the relation ceases, and the denomination consequent to it, though the other receive in itself no alteration at all: v. g. Caius, whom I consider to-day as a father, ceases to be so to-morrow, only

Change of relation may be without any change in the subject.

by the death of his son, without any alteration made in himself. Nay, barely by the mind's changing the object to which it compares any thing, the same thing is capable of having contrary denominations at the same time; v. g. Caius, compared to several persons, may truly be said to be older and younger, stronger and weaker, &c.

Relation only betwixt two things. § 6. Whatsoever doth or can exist, or be considered as one thing, is positive; and so not only simple ideas and substances, but

modes also, are positive beings: though the parts of which they consist are very often relative one to another; but the whole together considered as one thing, producing in us the complex idea of one thing, which idea is in our minds, as one picture, though an aggregate of divers parts, and under one name, it is a positive or absolute thing, or idea. Thus a triangle, though the parts thereof compared one to another be relative, yet the idea of the whole is a positive absolute idea. The same may be said of a family, a tune, &c. for there can be no relation, but betwixt two things considered as two things. There must always be in relation two ideas, or things, either in themselves really separate, or considered as distinct, and then a ground or occasion for their comparison.

All things capable of relation. § 7. Concerning relation in general, these things may be considered.

First, that there is no one thing, whether simple idea, substance, mode, or relation, or name of either of them, which is not capable of almost an infinite number of considerations, in reference to other things; and therefore this makes no small part of men's thoughts and words: v. g. one single man may at once be concerned in, and sustain all these following relations, and many more, viz. father, brother, son, grandfather, grandson, father-in-law, son-in-law, husband, friend, enemy, subject, general, judge, patron, client, professor, European, Englishman, islander, servant, master, possessor, captain, superior, inferior, bigger, less, older, younger, contemporary, like, unlike, &c. to an almost infinite number: he being ca-

pable of as many relations, as there can be occasions of comparing him to other things, in any manner of agreement, disagreement, or respect whatsoever. For, as I said, relation is a way of comparing or considering two things together, and giving one or both of them some appellation from that comparison; and sometimes giving even the relation itself a name.

§ 8. Secondly, this farther may be con- The ideas of sidered concerning relation, that though it ^{relations} be not contained in the real existence of ^{clearer often} things, but something extraneous and su- ^{than of the} perinduced; yet the ideas which relative ^{subjects re-} lated. words stand for, are often clearer and more distinct, than of those substances to which they do belong. The notion we have of a father, or brother, is a great deal clearer and more distinct, than that we have of a man; or, if you will, paternity is a thing whereof it is easier to have a clear idea, than of humanity: and I can much easier conceive what a friend is, than what God. Because the knowledge of one action, or one simple idea, is oftentimes sufficient to give me the notion of a relation: but to the knowing of any substantial being, an accurate collection of sundry ideas is necessary. A man, if he compares two things together, can hardly be supposed not to know what it is, wherein he compares them: so that when he compares any things together, he cannot but have a very clear idea of that relation. The ideas then of relations are capable at least of being more perfect and distinct in our minds than those of substances. Because it is commonly hard to know all the simple ideas which are really in any substance, but for the most part easy enough to know the simple ideas that make up any relation I think on, or have a name for: v. g. comparing two men, in reference to one common parent, it is very easy to frame the ideas of brothers, without having yet the perfect idea of a man. For significant relative words, as well as others, standing only for ideas; and those being all either simple, or made up of simple ones, it suffices, for the knowing the precise idea the relative term stands for, to have a clear conception of

that which is the foundation of the relation : which may be done without having a perfect and clear idea of the thing it is attributed to. Thus having the notion, that one laid the egg out of which the other was hatched, I have a clear idea of the relation of dam and chick, between the two cassiowaries in St. James's park ; though perhaps I have but a very obscure and imperfect idea of those birds themselves.

Relations
all terminate
in simple
ideas. § 9. Thirdly, though there be a great number of considerations, wherein things may be compared one with another, and so a multitude of relations; yet they all terminate in, and are concerned about, those simple ideas, either of sensation or reflection : which I think to be the whole materials of all our knowledge. To clear this, I shall show it in the most considerable relations that we have any notion of, and in some that seem to be the most remote from sense or reflection; which yet will appear to have their ideas from thence, and leave it past doubt, that the notions we have of them are but certain simple ideas, and so originally derived from sense or reflection.

Terms lead-
ing the mind
beyond the
subject de-
nominated,
are relative. § 10. Fourthly, that relation being the considering of one thing with another, which is extrinsecal to it, it is evident, that all words that necessarily lead the mind to any other ideas than are supposed really to exist in that thing, to which the words are applied, are relative words : v. g. a man black, merry, thoughtful, thirsty, angry, extended ; these, and the like, are all absolute, because they neither signify nor intimate any thing, but what does or is supposed really to exist in the man thus denominated : but father, brother, king, husband, blacker, merrier, &c. are words which, together with the thing they denominate, imply also something else separate and exterior to the existence of that thing.

Conclusion. § 11. Having laid down these premises concerning relation in general, I shall now proceed to show, in some instances, how all the ideas we have of relation are made up, as the others are, only

of simple ideas ; and that they all, how refined or remote from sense soever they seem, terminate at last in simple ideas. I shall begin with the most comprehensive relation, wherein all things that do or can exist are concerned ; and that is the relation of cause and effect. The idea whereof, how derived from the two fountains of all our knowledge, sensation, and reflection, I shall in the next place consider.

CHAP. XXVI.

Of Cause and Effect, and other Relations.

§ 1. IN the notice that our senses take of the constant vicissitude of things, we cannot but observe, that several particular, both qualities and substances, begin to exist ; and that they receive this their existence from the due application and operation of some other being. From this observation we get our ideas of cause and effect. That which produces any simple or complex idea we denote by the general name cause ; and that which is produced, effect. Thus finding that in that substance which we call wax fluidity, which is a simple idea that was not in it before, is constantly produced by the application of a certain degree of heat ; we call the simple idea of heat, in relation to fluidity in wax, the cause of it, and fluidity the effect. So also finding that the substance of wood, which is a certain collection of simple ideas, so called, by the application of fire is turned into another substance, called ashes, i. e. another complex idea, consisting of a collection of simple ideas, quite different from that complex idea which we call wood ; we consider fire, in relation to ashes, as cause, and the ashes as effect. So that whatever is considered by us to conduce or operate to the producing any particular simple idea, or collection of simple ideas, whether substance or mode, which did not before exist, hath thereby in our minds the relation of a cause, and so is denominated by us.

Creation, § 2. Having thus, from what our senses
 generation, are able to discover, in the operations of
 making al- bodies on one another, got the notion of
 teration. cause and effect, viz. that a cause is that
 which makes any other thing, either simple idea, sub-
 stance or mode, begin to be: and an effect is that which
 had its beginning from some other thing: the mind finds
 no great difficulty to distinguish the several originals of
 things into two sorts.

First, when the thing is wholly made new, so that
 no part thereof did ever exist before; as when a new
 particle of matter doth begin to exist, in *rerum natura*,
 which had before no being, and this we call creation.

Secondly, when a thing is made up of particles,
 which did all of them before exist, but that very thing
 so constituted of pre-existing particles, which, consid-
 ered all together, make up such a collection of simple
 ideas as had not any existence before; as this man, this
 egg, rose, or cherry, &c. And this, when referred to
 a substance, produced in the ordinary course of nature
 by internal principle, but set on work, and received
 from some external agent or cause, and working by
 insensible ways, which we perceive not, we call gene-
 ration; when the cause is extrinsecal, and the effect
 produced by a sensible separation, or juxta-position of
 discernible parts, we call it making; and such are all
 artificial things. When any simple idea is produced,
 which was not in that subject before, we call it altera-
 tion. Thus a man is generated, a picture made, and
 either of them altered, when any new sensible quality
 or simple idea is produced in either of them, which
 was not there before; and the things thus made to
 exist, which were not there before, are effects; and
 those things, which operated to the existence, causes.
 In which, and all other causes, we may observe, that
 the notion of cause and effect has its rise from ideas,
 received by sensation, or reflection; and that this rela-
 tion, how comprehensible soever, terminates at last in
 them. For to have the idea of cause and effect, it suf-
 fices to consider any simple idea, or substance, as begin-
 ning to exist by the operation of some other, without
 knowing the manner of that operation.

§ 3. Time and place are also the foundations of very large relations, and all finite beings at least are concerned in them. But ^{Relations of time.} having already shown, in another place, how we get these ideas, it may suffice here to intimate, that most of the denominations of things, received from time, are only relations. Thus when any one says, that queen Elizabeth lived sixty-nine, and reigned forty-five years, these words import only the relation of that duration to some other, and mean no more than this, that the duration of her existence was equal to sixty-nine, and the duration of her government to forty-five annual revolutions of the sun ; and so are all words, answering, how long. Again, William the Conqueror invaded England about the year 1066, which means this, that taking the duration from our Saviour's time, till now, for one entire great length of time, it shows at what distance this invasion was from the two extremes : and so do all words of time, answering to the question, when, which show only the distance of any point of time, from the period of a longer duration, from which we measure, and to which we thereby consider it as related.

§ 4. There are yet, besides those, other words of time that ordinarily are thought to stand for positive ideas, which yet will, when considered, be found to be relative, such as are young, old, &c. which include and intimate the relation any thing has to a certain length of duration, whereof we have the idea in our minds. Thus having settled in our thoughts the idea of the ordinary duration of a man to be seventy years, when we say a man is young, we mean that his age is yet but a small part of that which usually men attain to : and when we denominate him old, we mean that his duration is run out almost to the end of that which men do not usually exceed. And so it is but comparing the particular age, or duration of this or that man, to the idea of that duration which we have in our minds as ordinarily belonging to that sort of animals : which is plain, in the application of these names to other things : for a man is called young at twenty years, and very young at seven years old ; but yet a

horse we call old at twenty, and a dog at seven years ; because in each of these we compare their age to different ideas of duration, which are settled in our minds, as belonging to these several sorts of animals, in the ordinary course of nature. But the sun and stars, though they have out-lived several generations of men, we call not old, because we do not know what period God hath set to that sort of beings. This term belonging properly to those things, which we can observe in the ordinary course of things, by a natural decay, to come to an end in a certain period of time ; and so have in our minds, as it were, a standard to which we can compare the several parts of their duration ; and, by the relation they bear thereunto, call them young or old : which we cannot therefore do to a ruby or diamond, things whose usual periods we know not.

§ 5. The relation also that things have to one another in their places and distances, is very obvious to observe ; as above, below, a mile distant from Charing-cross, in England, and in London. But as in duration, so in extension and bulk, there are some ideas that are relative, which we signify by names that are thought positive ; as great and little are truly relations. For here also having, by observation, settled in our minds the ideas of the bigness of several species of things from those we have been most accustomed to, we make them as it were the standards whereby to denominate the bulk of others. Thus we call a great apple, such a one as is bigger than the ordinary sort of those we have been used to ; and a little horse, such a one as comes not up to the size of that idea, which we have in our minds, to belong ordinarily to horses : and that will be a great horse to a Welshman, which is but a little one to a Fleming ; they two having, from the different breed of their countries, taken several-sized ideas to which they compare, and in relation to which they denominate their great and their little.

§ 6. So likewise weak and strong are Absolute terms often but relative denominations of power, compared to some ideas we have at that time stand for relations. of greater or less power. Thus when we

say a weak man, we mean one that has not so much strength or power to move, as usually men have, or usually those of his size have: which is a comparing his strength to the idea we have of the usual strength of men, or men of such a size. The like, when we say the creatures are all weak things; weak, there, is but a relative term, signifying the disproportion there is in the power of God and the creatures. And so abundance of words, in ordinary speech, stand only for relations (and perhaps the greatest part) which at first sight seem to have no such signification: v. g. the ship has necessary stores. Necessary and stores are both relative words; one having a relation to the accomplishing the voyage intended, and the other to future use. All which relations, how they are confined to and terminate in ideas derived from sensation or reflection, is too obvious to need any explication.

CHAP. XXVII.*Of Identity and Diversity.*

§ 1. ANOTHER occasion the mind often wherein takes of comparing, is the very being of identity consisting; when considering any thing as existing at any determined time and place, we compare it with itself existing at another time, and thereon form the ideas of identity and diversity. When we see any thing to be in any place in any instant of time, we are sure (be it what it will) that it is that very thing, and not another, which at that same time exists in another place, how like and undistinguishable soever it may be in all other respects: and in this consists identity, when the ideas it is attributed to vary not at all from what they were that moment wherein we consider their former existence, and to which we compare the present. For we never finding, nor conceiving it possible, that two things of the same kind should exist in the same place at the same time, we rightly conclude, that whatever exists any where at any time, excludes all of the same kind, and is there itself alone. When therefore we demand, whether any thing

be the same or no; it refers always to something that existed such a time in such a place, which it was certain at that instant was the same with itself, and no other. From whence it follows, that one thing cannot have two beginnings of existence, nor two things one beginning; it being impossible for two things of the same kind to be or exist in the same instant, in the very same place, or one and the same thing in different places. That therefore that had one beginning, is the same thing; and that which had a different beginning in time and place from that, is not the same, but diverse. That which has made the difficulty about this relation, has been the little care and attention used in having precise notions of the things to which it is attributed.

§ 2. We have the ideas but of three sorts of substances; 1. God. 2. Finite intelligences. 3. Bodies. First, God is without beginning, eternal, unalterable, and every where; and therefore concerning his identity, there can be no doubt. Secondly, finite spirits having had each its determinate time and place of beginning to exist, the relation to that time and place will always determine to each of them its identity, as long as it exists. Thirdly, the same will hold of every particle of matter, to which no addition or subtraction of matter being made, it is the same: For though these three sorts of substances, as we term them, do not exclude one another out of the same place; yet we cannot conceive but that they must necessarily each of them exclude any of the same kind out of the same place: or else the notions and names of identity and diversity would be in vain, and there could be no such distinction of substances, or any thing else one from another. For example: could two bodies be in the same place at the same time, then those two parcels of matter must be one and the same, take them great or little: nay, all bodies must be one and the same. For by the same reason that two particles of matter may be in one place, all bodies may be in one place: which, when it can be supposed, takes away the distinction of identity and diversity of one and more, and renders it ridiculous. But it

being a contradiction, that two or more should be one, identity and diversity are relations and ways of comparing well-founded, and of use to the understanding. All other things being but modes or relations ultimately terminated in substances, the identity and diversity of each particular existence ^{Identity of modes.} of them too will be by the same way determined: only as to things whose existence is in succession, such as are the actions of finite beings, v.g. motion and thought, both which consist in a continued train of succession: concerning their diversity, there can be no question: because each perishing the moment it begins, they cannot exist in different times, or in different places, as permanent beings can at different times exist in distant places; and therefore no motion or thought, considered as at different times, can be the same, each part thereof having a different beginning of existence.

§ 3. From what has been said, it is easy to discover what is so much inquired after, ^{Principium individuationis.} the principium individuationis; and that, it is plain, is existence itself, which determines a being of any sort to a particular time and place, incommunicable to two beings of the same kind. This, though it seems easier to conceive in simple substances or modes, yet when reflected on is not more difficult in compound ones, if care be taken to what it is applied: v.g. let us suppose an atom, i.e. a continued body under one immutable superficies, existing in a determined time and place; it is evident that, considered in any instant of its existence, it is in that instant the same with itself. For being at that instant what it is, and nothing else, it is the same, and so must continue as long as its existence is continued; for so long it will be the same, and no other. In like manner, if two or more atoms be joined together into the same mass, every one of those atoms will be the same, by the foregoing rule: and whilst they exist united together, the mass, consisting of the same atoms, must be the same mass, or the same body, let the parts be ever so differently jumbled. But if one of these atoms be taken away,

or one new one added, it is no longer the same mass, or the same body. In the state of living creatures, their identity depends not on a mass of the same particles, but on something else. For in them the variation of great parcels of matters alters not the identity : an oak growing from a plant to a great tree, and then lopped, is still the same oak ; and a colt grown up to a horse, sometimes fat, sometimes lean, is all the while the same horse : though in both these cases, there may be a manifest change of the parts ; so that truly they are not either of them the same masses of matter, though they be truly one of them the same oak, and the other the same horse. The reason whereof is, that in these two cases, a mass of matter, and a living body, identity is not applied to the same thing.

§ 4. We must therefore consider wherein
 Identity of an oak differs from a mass of matter, and
 vegetables. that seems to me to be in this, that the one is only the cohesion of particles of matter any how united, the other such a disposition of them as constitutes the parts of an oak ; and such an organization of those parts as is fit to receive and distribute nourishment, so as to continue and frame the wood, bark, and leaves, &c. of an oak, in which consists the vegetable life. That being then one plant which has such an organization of parts in one coherent body partaking of one common life, it continues to be the same plant as long as it partakes of the same life, though that life be communicated to new particles of matter vitally united to the living plant, in a like continued organization conformable to that sort of plants. For this organization being at any one instant in any one collection of matter, is in that particular concrete distinguished from all other, and is that individual life which existing constantly from that moment both forwards and backwards, in the same continuity of insensibly succeeding parts united to the living body of the plant, it has that identity, which makes the same plant, and all the parts of it parts of the same plant, during all the time that they exist united in that continued orga-

nization, which is fit to convey that common life to all the parts so united.

§ 5. The case is not so much different in brutes, but that any one may hence see what makes an animal, and continues it the same. Identity of animals. Something we have like this in machines, and may serve to illustrate it. For example, what is a watch? It is plain it is nothing but a fit organization, or construction of parts to a certain end, which when a sufficient force is added to it, it is capable to attain. If we would suppose this machine one continued body, all whose organized parts were repaired, increased, or diminished by a constant addition or separation of insensible parts, with one common life, we should have something very much like the body of an animal; with this difference, that in an animal the fitness of the organization, and the motion wherein life consists, begin together, the motion coming from within; but in machines, the force coming sensibly from without, is often away when the organ is in order, and well fitted to receive it.

§ 6. This also shows wherein the identity of the same man consists: viz. in nothing but a participation of the same continued life, by constantly fleeting particles of matter, in succession vitally united to the same organized body. Identity of man. He that shall place the identity of man in any thing else, but like that of other animals in one fitly organized body, taken in any one instant, and from thence continued under one organization of life in several successively fleeting particles of matter united to it, will find it hard to make an embryo, one of years, mad and sober, the same man, by any supposition, that will not make it possible for Seth, Ismael, Socrates, Pilate, St. Austin, and Cæsar Borgia, to be the same man. For if the identity of soul alone makes the same man, and there be nothing in the nature of matter why the same individual spirit may not be united to different bodies, it will be possible that those men living in distant ages, and of different tempers, may have been the same man: which way of speaking must be, from a very strange

use of the word man, applied to an idea, out of which body and shape are excluded. And that way of speaking would agree yet worse with the notions of those philosophers who allow of transmigration, and are of opinion that the souls of men may, for their miscarriages, be detrudd into the bodies of beasts, as fit habitations, with organs suited to the satisfaction of their brutal inclinations. But yet I think nobody, could he be sure that the soul of Heliogabalus were in one of his hogs, would yet say that hog were a man or Heliogabalus.

Identity suited to the idea. § 7. It is not therefore unity of substance that comprehends all sorts of identity, or will determine it in every case :

but to conceive and judge of it aright, we must consider what idea the word it is applied to stands for ; it being one thing to be the same substance, another the same man, and a third the same person, if person, man, and substance, are three names standing for three different ideas ; for such as is the idea belonging to that name, such must be the identity : which, if it had been a little more carefully attended to, would possibly have prevented a great deal of that confusion which often occurs about this matter, with no small seeming difficulties, especially concerning personal identity, which therefore we shall, in the next place, a little consider.

Same man. § 8. An animal is a living organized body ; and consequently the same animal, as we have observed, is the same continued life communicated to different particles of matter, as they happen successively to be united to that organized living body. And whatever is talked of other definitions, ingenuous observation puts it past doubt, that the idea in our minds, of which the sound man in our mouths is the sign, is nothing else but of an animal of such a certain form : since I think I may be confident, that whoever should see a creature of his own shape and make, though it had no more reason all its life than a cat or a parrot, would call him still a man ; or whoever should hear a cat or a parrot discourse, reason and

philosophize, would call or think it nothing but a cat or a parrot; and say, the one was a dull, irrational man, and the other a very intelligent rational parrot. A relation we have in an author of great note is sufficient to countenance the supposition of a rational parrot. His words are: *

"I had a mind to know from prince Maurice's own mouth the account of a common, but much credited story, that I heard so often from many others, of an old parrot he had in Brazil during his government there, that spoke, and asked, and answered common questions like a reasonable creature: so that those of his train there generally concluded it to be witchery or possession; and one of his chaplains, who lived long afterwards in Holland, would never from that time endure a parrot, but said, they all had a devil in them. I had heard many particulars of this story, and assevered by people hard to be discredited, which made me ask prince Maurice what there was of it. He said, with his usual plainness and dryness in talk, there was something true, but a great deal false of what had been reported. I desired to know of him what there was of the first? He told me short and coldly, that he had heard of such an old parrot when he had been at Brazil; and though he believed nothing of it, and it was a good way off, yet he had so much curiosity as to send for it: that it was a very great and a very old one, and when it came first into the room where the prince was, with a great many Dutchmen about him, it said presently, What a company of white men are here! They asked it what it thought that man was, pointing to the prince? It answered, some general or other; when they brought it close to him, he asked it, † D'ou venez

* Memoirs of what passed in Christendom from 1672 to 1679, p. 357.

† Whence come ye? It answered, From Marinnan. The Prince, To whom do you belong? The Parrot, To a Portuguese. Prince, What do you there? Parrot, I look after the chickens. The Prince laughed and said, You look after the chickens? The Parrot answered, Yes, I, and I know well enough how to do it.

“vous? It answered, De Marinnan. The prince, A
 “qui estes vous? The parrot, A un Portugais. Prince,
 “Que fais tu la? Parrot, Je garde les poules. The
 “prince laughed, and said, Vous gardez les poules?
 “The parrot answered, Oui, moi; et je sçai bien faire;
 “and made the chuck four or five times that people
 “use to make to chickens when they call them. I set
 “down the words of this worthy dialogue in French,
 “just as prince Maurice said them to me. I asked
 “him in what language the parrot spoke, and he said,
 “in Brasilian; I asked whether he understood Brasi-
 “lian; he said, no, but he had taken care to have two
 “interpreters by him, the one a Dutchman that spoke
 “Brasilian, and the other a Brasilian that spoke
 “Dutch; that he asked them separately and privately,
 “and both of them agreed in telling him just the same
 “thing that the parrot had said. I could not but tell
 “this odd story, because it is so much out of the way,
 “and from the first hand, and what may pass for a good
 “one; for I dare say this prince at least believed him-
 “self in all he told me, having ever passed for a very
 “honest and pious man. I leave it to naturalists to
 “reason, and to other men to believe, as they please
 “upon it: however, it is not, perhaps, amiss to relieve
 “or enliven a busy scene sometimes with such digres-
 “sions, whether to the purpose or no.”

Same man. I have taken care that the reader should

have the story at large in the author's own words, because he seems to me not to have thought it incredible; for it cannot be imagined that so able a man as he, who had sufficiency enough to warrant all the testimonies he gives of himself, should take so much pains, in a place where it had nothing to do, to pin so close not only on a man whom he mentions as his friend, but on a prince in whom he acknowledges very great honesty and piety, a story, which if he himself thought incredible, he could not but also think ridiculous. The prince, it is plain, who vouches this story, and our author, who relates it from him, both of them call this talker a parrot: and I ask any one else, who thinks such a story fit to be told, whether if

this parrot, and all of its kind, had always talked, as we have a prince's word for it this one did, whether, I say, they would not have passed for a race of rational animals: but yet whether for all that they would have been allowed to be men, and not parrots? For I presume, it is not the idea of a thinking or rational being alone that makes the idea of a man in most people's sense, but of a body, so and so shaped, joined to it: and if that be the idea of a man, the same successive body not shifted all at once, must, as well as the same immaterial spirit, go to the making of the same man.

§ 9. This being premised, to find wherein personal identity consists, we must consider ^{Personal identity.} what person stands for; which, I think, is a thinking intelligent being, that has reason and reflection, and can consider itself as itself, the same thinking thing in different times and places; which it does only by that consciousness which is inseparable from thinking, and, as it seems to me, essential to it: it being impossible for any one to perceive, without perceiving that he does perceive. When we see, hear, smell, taste, feel, meditate, or will any thing, we know that we do so. Thus it is always as to our present sensations and perceptions: and by this every one is to himself that which he calls self; it not being considered in this case whether the same self be continued in the same or divers substances. For since consciousness always accompanies thinking, and it is that which makes every one to be what he calls self, and thereby distinguishes himself from all other thinking things; in this alone consists personal identity, i. e. the sameness of a rational being: and as far as this consciousness can be extended backwards to any past action or thought, so far reaches the identity of that person; it is the same self now it was then; and it is by the same self with this present one that now reflects on it, that that action was done.

§ 10. But it is farther inquired, whether it be the same identical substance? ^{Consciousness makes personal identity.} This few would think they had reason to doubt of, if these perceptions, with their

consciousness, always remained present in the mind, whereby the same thinking thing would be always consciously present, and, as would be thought, evidently the same to itself. But that which seems to make the difficulty is this, that this consciousness being interrupted always by forgetfulness, there being no moment of our lives wherein we have the whole train of all our past actions before our eyes in one view, but even the best memories losing the sight of one part whilst they are viewing another; and we sometimes, and that the greatest part of our lives, not reflecting on our past selves, being intent on our present thoughts, and in sound sleep having no thoughts at all, or at least none with that consciousness which remarks our waking thoughts: I say, in all these cases, our consciousness being interrupted, and we losing the sight of our past selves, doubts are raised whether we are the same thinking thing, i. e. the same substance or no. Which however reasonable or unreasonable, concerns not personal identity at all: the question being, what makes the same person, and not whether it be the same identical substance, which always thinks in the same person; which in this case matters not at all: different substances, by the same consciousness (where they do partake in it), being united into one person, as well as different bodies by the same life are united into one animal, whose identity is preserved, in that change of substances, by the unity of one continued life. For it being the same consciousness that makes a man be himself to himself, personal identity depends on that only, whether it be annexed solely to one individual substance, or can be continued in a succession of several substances. For as far as any intelligent being can repeat the idea of any past action with the same consciousness it had of it at first, and with the same consciousness it has of any present action; so far it is the same personal self. For it is by the consciousness it has of its present thoughts and actions, that it is self to itself now, and so will be the same self, as far as the same consciousness can extend to actions past or to come; and would be by distance of time, or change of substance, no more two

persons, than a man be two men by wearing other clothes to-day than he did yesterday, with a long or a short sleep between: the same consciousness uniting those distant actions into the same person, whatever substances contributed to their production.

§ 11. That this is so, we have some Personal identity in change of substances. kind of evidence in our very bodies, all whose particles, whilst vitally united to this same thinking conscious self, so that we feel when they are touched, and are affected by, and conscious of good or harm that happens to them, are a part of ourselves; i. e. of our thinking conscious self. Thus the limbs of his body are to every one a part of himself; he sympathizes and is concerned for them. Cut off a hand, and thereby separate it from that consciousness he had of its heat, cold, and other affections, and it is then no longer a part of that which is himself, any more than the remotest part of matter. Thus we see the substance, whereof personal self consisted at one time, may be varied at another, without the change of personal identity; there being no question about the same person, though the limbs which but now were a part of it, be cut off.

§ 12. But the question is, "whether if the same substance which thinks, be changed, it can be the same person; or, remaining the same, it can be different persons?"

And to this I answer, first, This can be Whether in the change of thinking substances. no question at all to those who place thought in a purely material animal constitution, void of an immaterial substance. For whether their supposition be true or no, it is plain they conceive personal identity preserved in something else than identity of substance; as animal identity is preserved in identity of life, and not of substance. And therefore those who place thinking in an immaterial substance only, before they can come to deal with these men, must show why personal identity cannot be preserved in the change of immaterial substances, or variety of particular immaterial substances, as well as animal identity is preserved in the change of material

substances, or variety of particular bodies : unless they will say, it is one immaterial spirit that makes the same life in brutes, as it is one immaterial spirit that makes the same person in men ; which the Cartesians at least will not admit, for fear of making brutes thinking things too.

§ 13. But next, as to the first part of the question, “ whether if the same thinking substance (supposing “ immaterial substances only to think) be changed, it “ can be the same person ? ” I answer, that cannot be resolved, but by those who know what kind of substances they are that do think, and whether the consciousness of past actions can be transferred from one thinking substance to another. I grant, were the same consciousness the same individual action, it could not : but it being a present representation of a past action, why it may not be possible, that that may be represented to the mind to have been, which really never was, will remain to be shown. And therefore how far the consciousness of past actions is annexed to any individual agent, so that another cannot possibly have it, will be hard for us to determine, till we know what kind of action it is that cannot be done without a reflex act of perception accompanying it, and how performed by thinking substances, who cannot think without being conscious of it. But that which we call the same consciousness, not being the same individual act, why one intellectual substance may not have represented to it, as done by itself, what it never did, and was perhaps done by some other agent ; why, I say, such a representation may not possibly be without reality of matter of fact, as well as several representations in dreams are, which yet whilst dreaming we take for true, will be difficult to conclude from the nature of things. And that it never is so, will by us, till we have clearer views of the nature of thinking substances, be best resolved into the goodness of God, who as far as the happiness or misery of any of his sensible creatures is concerned in it, will not by a fatal error of theirs transfer from one to another that consciousness which draws reward or punishment with it. How far this may be an argument

against those who would place thinking in a system of fleeting animal spirits, I leave to be considered. But yet to return to the question before us, it must be allowed, that if the same consciousness (which, as has been shown, is quite a different thing from the same numerical figure or motion in body) can be transferred from one thinking substance to another, it will be possible that two thinking substances may make but one person. For the same consciousness being preserved, whether in the same or different substances, the personal identity is preserved.

§ 14. As to the second part of the question, “whether the same immaterial substance remaining, there may be two distinct persons?” which question seems to me to be built on this, whether the same immaterial being, being conscious of the action of its past duration, may be wholly stripped of all the consciousness of its past existence, and lose it beyond the power of ever retrieving again; and so as it were beginning a new account from a new period, have a consciousness that cannot reach beyond this new state. All those who hold pre-existence are evidently of this mind, since they allow the soul to have no remaining consciousness of what it did in that pre-existent state, either wholly separate from body, or informing any other body; and if they should not, it is plain, experience would be against them. So that personal identity reaching no farther than consciousness reaches, a pre-existent spirit not having continued so many ages in a state of silence, must needs make different persons. Suppose a Christian, Platonist, or Pythagorean should, upon God’s having ended all his works of creation the seventh day, think his soul hath existed ever since; and would imagine it has revolved in several human bodies, as I once met with one, who was persuaded his had been the soul of Socrates; (how reasonably I will not dispute; this I know, that in the post he filled, which was no inconsiderable one, he passed for a very rational man, and the press has shown that he wanted not parts or learning) would any one say, that he being not conscious of any of Socrates’s actions or thoughts,

could be the same person with Socrates? Let any one reflect upon himself, and conclude that he has in himself an immaterial spirit, which is that which thinks in him, and in the constant change of his body keeps him the same; and is that which he calls himself: Let him also suppose it to be the same soul that was in Nestor or Thersites, at the siege of Troy (for souls being, as far as we know any thing of them in their nature, indifferent to any parcel of matter, the supposition has no apparent absurdity in it), which it may have been, as well as it is now the soul of any other man: but he now having no consciousness of any of the actions either of Nestor or Thersites, does or can he conceive himself the same person with either of them? can he be concerned in either of their actions? attribute them to himself, or think them his own more than the actions of any other men that ever existed? So that this consciousness not reaching to any of the actions of either of those men, he is no more one self with either of them, than if the soul or immaterial spirit that now informs him, had been created, and began to exist, when it began to inform his present body; though it were ever so true, that the same spirit that informed Nestor's or Thersites's body, were numerically the same that now informs his. For this would no more make him the same person with Nestor, than if some of the particles of matter that were once a part of Nestor, were now a part of this man; the same immaterial substance, without the same consciousness, no more making the same person by being united to any body, than the same particle of matter, without consciousness united to any body, makes the same person. But let him once find himself conscious of any of the actions of Nestor, he then finds himself the same person with Nestor.

§ 15. And thus we may be able, without any difficulty, to conceive the same person at the resurrection, though in a body not exactly in make or parts the same which he had here, the same consciousness going along with the soul that inhabits it. But yet the soul alone, in the change of bodies, would scarce to any one, but to him that makes the soul the man, be enough to

make the same man. For should the soul of a prince, carrying with it the consciousness of the prince's past life, enter and inform the body of a cobbler, as soon as deserted by his own soul, every one sees he would be the same person with the prince, accountable only for the prince's actions: but who would say it was the same man? The body too goes to the making the man, and would, I guess, to every body determine the man in this case; wherein the soul, with all its princely thoughts about it, would not make another man: but he would be the same cobbler to every one besides himself. I know that, in the ordinary way of speaking, the same person, and the same man, stand for one and the same thing. And indeed every one will always have a liberty to speak as he pleases, and to apply what articulate sounds to what ideas he thinks fit, and change them as often as he pleases. But yet when we will inquire what makes the same spirit, man, or person, we must fix the ideas of spirit, man, or person in our minds; and having resolved with ourselves what we mean by them, it will not be hard to determine in either of them, or the like, when it is the same, and when not.

§ 16. But though the same immaterial substance or soul does not alone, wherever it be, Consciousness makes the same person. and in whatsoever state, make the same man; yet it is plain consciousness, as far as ever it can be extended, should it be to ages past, unites existences and actions, very remote in time, into the same person, as well as it does the existences and actions of the immediately preceding moment; so that whatever has the consciousness of present and past actions, is the same person to whom they both belong. Had I the same consciousness that I saw the ark and Noah's flood, as that I saw an overflowing of the Thames last winter, or as that I write now; I could no more doubt that I who write this now, that saw the Thames overflowed last winter, and that viewed the flood at the general deluge, was the same self, place that self in what substance you please, than that I who write this am the same myself now whilst I write (whether I consist of all the same substance, material or immaterial, or no) that I was yesterday. For as to this point of being the same

self, it matters not whether this present self be made up of the same or other substances; I being as much concerned, and as justly accountable for any action that was done a thousand years since, appropriated to me now by this self-consciousness, as I am for what I did the last moment.

Self depends on consciousness. § 17. Self is that conscious thinking thing, whatever substance made up of (whether spiritual or material, simple or compounded, it matters not), which is sensible, or conscious of pleasure and pain, capable of happiness or misery, and so is concerned for itself, as far as that consciousness extends. Thus every one finds, that whilst comprehended under that consciousness, the little finger is as much a part of himself as what is most so. Upon separation of this little finger, should this consciousness go along with the little finger, and leave the rest of the body, it is evident the little finger would be the person, the same person; and self then would have nothing to do with the rest of the body. As in this case it is the consciousness that goes along with the substance, when one part is separate from another, which makes the same person, and constitutes this inseparable self; so it is in reference to substances remote in time. That with which the consciousness of this present thinking thing can join itself, makes the same person, and is one self with it, and with nothing else; and so attributes to itself, and owns all the actions of that thing as its own, as far as that consciousness reaches, and no farther; as every one who reflects will perceive.

Objects of reward and punishment. § 18. In this personal identity, is founded all the right and justice of reward and punishment; happiness and misery being that for which every one is concerned for himself, and not mattering what becomes of any substance not joined to, or affected with that consciousness. For as it is evident in the instance I gave but now, if the consciousness went along with the little finger when it was cut off, that would be the same self which was concerned for the whole body yesterday, as making part of itself, whose actions then it cannot but admit as its own now. Though if the same body should still live, and

immediately, from the separation of the little finger, have its own peculiar consciousness, whereof the little finger knew nothing; it would not at all be concerned for it, as a part of itself, or could own any of its actions, or have any of them imputed to him.

§ 19. This may show us wherein personal identity consists; not in the identity of substance, but, as I have said, in the identity of consciousness; wherein, if Socrates and the present mayor of Queenborough agree, they are the same person: if the same Socrates waking and sleeping do not partake of the same consciousness, Socrates waking and sleeping is not the same person. And to punish Socrates waking for what sleeping Socrates thought, and waking Socrates was never conscious of; would be no more of right, than to punish one twin for what his brother-twin did, whereof he knew nothing, because their outsides were so like, that they could not be distinguished; for such twins have been seen.

§ 20. But yet possibly it will still be objected, suppose I wholly lose the memory of some parts of my life beyond a possibility of retrieving them; so that perhaps I shall never be conscious of them again; yet am I not the same person that did those actions, had those thoughts that I once was conscious of, though I have now forgot them? To which I answer, that we must here take notice what the word I is applied to: which, in this case, is the man only. And the same man being presumed to be the same person, I is easily here supposed to stand also for the same person. But if it be possible for the same man to have distinct incommunicable consciousness at different times, it is past doubt the same man would at different times make different persons; which, we see, is the sense of mankind in the solemnest declaration of their opinions; human laws not punishing the mad man for the sober man's actions, nor the sober man for what the mad man did, thereby making them two persons: which is somewhat explained by our way of speaking in English, when we say such an one is not himself, or is beside himself; in which phrases it is insinuated, as if those who now, or at least first used them, thought that self was changed, the self-same person was no longer in that man.

Difference
between
identity of
man and
person.

§ 21. But yet it is hard to conceive that Socrates, the same individual man, should be two persons. To help us a little in this, we must consider what is meant by Socrates, or the same individual man.

First, it must be either the same individual, immaterial, thinking substance ; in short, the same numerical soul, and nothing else.

Secondly, or the same animal, without any regard to an immaterial soul.

Thirdly, or the same immaterial spirit united to the same animal.

Now take which of these suppositions you please, it is impossible to make personal identity to consist in any thing but consciousness, or reach any farther than that does.

For by the first of them, it must be allowed possible that a man born of different women, and in distant times, may be the same man. A way of speaking, which whoever admits, must allow it possible for the same man to be two distinct persons, as any two that have lived in different ages, without the knowledge of one another's thoughts.

By the second and third, Socrates in this life, and after it, cannot be the same man any way, but by the same consciousness ; and so making human identity to consist in the same thing wherein we place personal identity, there will be no difficulty to allow the same man to be the same person. But then they who place human identity in consciousness only, and not in something else, must consider how they will make the infant Socrates the same man with Socrates after the resurrection. But whatsoever to some men makes a man, and consequently the same individual man, wherein perhaps few are agreed, personal identity can by us be placed in nothing but consciousness (which is that alone which makes what we call self) without involving us in great absurdities.

§ 22. But is not a man drunk and sober the same person? Why else is he punished for the fact he commits when drunk, though he be never afterwards conscious of it? Just as much the same person as a man, that

walks, and does other things in his sleep, is the same person, and is answerable for any mischief he shall do in it. Human laws punish both, with a justice suitable to their way of knowledge; because in these cases, they cannot distinguish certainly what is real, what counterfeit: and so the ignorance in drunkenness or sleep is not admitted as a plea. For though punishment be annexed to personality, and personality to consciousness, and the drunkard perhaps be not conscious of what he did; yet human judicatures justly punish him, because the fact is proved against him, but want of consciousness cannot be proved for him. But in the great day, wherein the secrets of all hearts shall be laid open, it may be reasonable to think, no one shall be made to answer for what he knows nothing of; but shall receive his doom, his conscience accusing or excusing him.

§ 23. Nothing but consciousness can unite remote existences into the same person, the identity of substance will not do it. Consciousness alone makes self. For whatever substance there is, however framed, without consciousness there is no person: and a carcase may be a person, as well as any sort of substance be so without consciousness.

Could we suppose two distinct incommunicable consciousnesses acting the same body, the one constantly by day, the other by night; and, on the other side, the same consciousness acting by intervals two distinct bodies: I ask in the first case, whether the day and the night man would not be two as distinct persons, as Socrates and Plato? And whether, in the second case, there would not be one person in two distinct bodies, as much as one man is the same in two distinct cloathings? Nor is it at all material to say, that this same, and this distinct consciousness, in the cases above mentioned, is owing to the same and distinct immaterial substances, bringing it with them to those bodies; which, whether true or no, alters not the case: since it is evident the personal identity would equally be determined by the consciousness, whether that consciousness

were annexed to some individual immaterial substance or no. For granting, that the thinking substance in man must be necessarily supposed immaterial, it is evident that immaterial thinking thing may sometimes part with its past consciousness, and be restored to it again, as appears in the forgetfulness men often have of their past actions: and the mind many times recovers the memory of a past consciousness, which it had lost for twenty years together. Make these intervals of memory and forgetfulness, to take their turns regularly by day and night, and you have two persons with the same immaterial spirit, as much as in the former instance two persons with the same body. So that self is not determined by identity or diversity of substance, which it cannot be sure of but only by identity of consciousness.

§ 24. Indeed it may conceive the substance, whereof it is now made up, to have existed formerly, united in the same conscious being: but consciousness removed, that substance is no more itself, or makes no more a part of it than any other substance; as is evident in the instance we have already given of a limb cut off, of whose heat, or cold, or other affections, having no longer any consciousness, it is no more of a man's self, than any other matter of the universe. In like manner it will be in reference to any immaterial substance, which is void of that consciousness whereby I am myself to myself: if there be any part of its existence, which I cannot upon recollection join with that present consciousness whereby I am now myself, it is in that part of its existence no more myself, than any other immaterial being. For whatsoever any substance has thought or done, which I cannot recollect, and by my consciousness make my own thought and action, it will no more belong to me, whether a part of me thought or did it, than if it had been thought or done by any other immaterial being any where existing.

§ 25. I agree, the more probable opinion is, that this consciousness is annexed to, and the affection of one individual immaterial substance.

But let men, according to their diverse hypotheses, resolve of that as they please, this every intelligent being, sensible of happiness or misery, must grant, that there is something that is himself that he is concerned for, and would have happy: that this self has existed in a continued duration more than one instant, and therefore it is possible may exist, as it has done, months and years to come, without any certain bounds to be set to its duration, and may be the same self, by the same consciousness continued on for the future. And thus, by this consciousness, he finds himself to be the same self which did such or such an action some years since, by which he comes to be happy or miserable now. In all which account of self, the same numerical substance is not considered as making the same self; but the same continued consciousness, in which several substances may have been united, and again separated from it; which, whilst they continued in a vital union with that, wherein this consciousness then resided, made a part of that same self. Thus any part of our bodies vitally united to that which is conscious in us, makes a part of ourselves: but upon separation from the vital union, by which that consciousness is communicated, that which a moment since was part of ourselves, is now no more so, than a part of another man's self is a part of me: and it is not impossible, but in a little time may become a real part of another person. And so we have the same numerical substance become a part of two different persons; and the same person preserved under the change of various substances. Could we suppose any spirit wholly stripped of all its memory or consciousness of past actions, as we find our minds always are of a great part of ours, and sometimes of them all; the union or separation of such a spiritual substance would make no variation of personal identity, any more than that of any particle of matter does. Any substance vitally united to the present thinking being, is a part of that very same self which now is: any thing united to it by a consciousness of former actions, makes also a part of the same self, which is the same both then and now.

Person a fo-
rensic term.
 § 26. Person, as I take it, is the name for this self. Wherever a man finds what he calls himself, there I think another may say is the same person. It is a forensic term appropriating actions and their merit; and so belongs only to intelligent agents capable of a law, and happiness and misery. This personality extends itself beyond present existence to what is past, only by consciousness, whereby it becomes concerned and accountable, owns and imputes to itself past actions, just upon the same ground, and for the same reason that it does the present. All which is founded in a concern for happiness, the unavoidable concomitant of consciousness; that which is conscious of pleasure and pain, desiring that that self that is conscious should be happy. And therefore whatever past actions it cannot reconcile or appropriate to that present self by consciousness, it can be no more concerned in, than if they had never been done: and to receive pleasure or pain, i. e. reward or punishment, on the account of any such action, is all one as to be made happy or miserable in its first being, without any demerit at all. For supposing a man punished now for what he had done in another life, whereof he could be made to have no consciousness at all, what difference is there between that punishment, and being created miserable? And therefore conformable to this the apostle tells us, that at the great day, when every one shall "receive according to his doings, the secrets of all hearts shall be laid open." The sentence shall be justified by the consciousness all persons shall have, that they themselves, in what bodies soever they appear, or what substances soever that consciousness adheres to, are the same that committed those actions, and deserve that punishment for them.

§ 27. I am apt enough to think I have, in treating of this subject, made some suppositions that will look strange to some readers, and possibly they are so in themselves. But yet, I think, they are such as are pardonable in this ignorance we are in of the nature of that thinking thing that is in us, and which we look on as ourselves. Did we know what it was, or

how it was tied to a certain system of fleeting animal spirits; or whether it could or could not perform its operations of thinking and memory out of a body organized as ours is: and whether it has pleased God, that no one such spirit shall ever be united to any one but such body, upon the right constitution of whose organs its memory should depend: we might see the absurdity of some of those suppositions I have made. But taking, as we ordinarily now do, (in the dark concerning these matters) the soul of a man, for an immaterial substance, independent from matter, and indifferent alike to it all, there can from the nature of things be no absurdity at all to suppose, that the same soul may, at different times, be united to different bodies, and with them make up, for that time, one man: as well as we suppose a part of a sheep's body yesterday should be a part of a man's body to-morrow, and in that union make a vital part of Melibœus himself, as well as it did of his ram.

§ 28. To conclude: Whatever substance begins to exist, it must, during its existence, necessarily be the same: whatever compositions of substances begin to exist, during the union of those substances the concrete must be the same: whatsoever mode begins to exist, during its existence it is the same: and so if the composition be of distinct substances and different modes, the same rule holds. Whereby it will appear, that the difficulty or obscurity that has been about this matter, rather rises from the names ill used, than from any obscurity in things themselves. For whatever makes the specific idea to which the name is applied, if that idea be steadily kept to, the distinction of any thing into the same and divers will easily be conceived, and there can arise no doubt about it.

§ 29. For supposing a rational spirit be the idea of a man, it is easy to know what is the same man; viz. the same spirit, whether separate or in a body, will be the same man. Supposing a rational spirit vitally united to a body of a certain conformation of parts to make a man, whilst

The difficulty from ill use of names.

Continued existence makes identity.

that rational spirit, with that vital conformation of parts, though continued in a fleeting successive body, remains, it will be the same. But if to any one the idea of a man be but the vital union of parts in a certain shape; as long as that vital union and shape remain, in a concrete no otherwise the same, but by a continued succession of fleeting particles, it will be the same. For whatever be the composition, whereof the complex idea is made, whenever existence makes it one particular thing under any denomination, the same existence, continued, preserves it the same individual under the same denomination.¹

¹ The doctrine of identity and diversity contained in this chapter, the Bishop of Worcester pretends to be inconsistent with the doctrine of the Christian faith, concerning the resurrection of the dead. His way of arguing from it is this: He says, The reason of believing the resurrection of the same body, upon Mr. Locke's grounds, is from the idea of identity. To which our author* answers: Give me leave, my lord, to say, that the reason of believing any article of the Christian faith (such as your lordship is here speaking of) to me, and upon my grounds, is its being a part of divine revelation: upon this ground I believed it, before I either writ that chapter of identity and diversity, and before I ever thought of those propositions which your lordship quotes out of that chapter; and upon the same ground I believe it still; and not from my idea of identity. This saying of your lordship's, therefore, being a proposition neither self-evident, nor allowed by me to be true, remains to be proved. So that your foundation failing, all your large superstructure built thereon, comes to nothing.

But, my lord, before we go any farther, I crave leave humbly to represent to your lordship, that I thought you undertook to make out that my notion of ideas was inconsistent with the articles of the Christian faith. But that which your lordship instances in here, is not, that I yet know, an article of the Christian faith. The resurrection of the dead I acknowledge to be an article of the Christian faith; but that the resurrection of the same body, in your lordship's sense of the same body, is an article of the Christian faith, is what, I confess, I do not yet know.

In the New Testament (wherein, I think, are contained all the articles of the Christian faith) I find our Saviour and the apostles to preach the resurrection of the dead, and the resurrection from the dead, in many places: but I do not remember any place where the resurrection of the same body is so much as mentioned. Nay, which is very remarkable in the case, I do not remember in any place of the New Testament (where the general resurrection at the last day is spoken

* In his 3d letter to the bishop of Worcester.

of) any such expression as the resurrection of the body, much less of the same body.

I say the general resurrection at the last day : because, where the resurrection of some particular persons, presently upon our Saviour's resurrection, is mentioned, the words are,* *The graves were opened, and many bodies of saints, which slept, arose, and came out of the graves after his resurrection, and went into the Holy City, and appeared to many :* of which peculiar way of speaking of this resurrection, the passage itself gives a reason in these words, *appeared to many, i. e. those who slept appeared, so as to be known to be risen.* But this could not be known, unless they brought with them the evidence, that they were those who had been dead ; whereof there were these two proofs, their graves were opened, and their bodies not only gone out of them, but appeared to be the same to those who had known them formerly alive, and knew them to be dead and buried. For if they had been those who had been dead so long, that all who knew them once alive were now gone, those to whom they appeared might have known them to be men ; but could not have known they were risen from the dead, because they never knew they had been dead. All that by their appearing they could have known, was, that they were so many living strangers, of whose resurrection they knew nothing. It was necessary therefore, that they should come in such bodies, as might in make and size, &c. appear to be the same they had before, that they might be known to those of their acquaintance, whom they appeared to. And it is probable they were such as were newly dead, whose bodies were not yet dissolved and dissipated ; and therefore, it is particularly said here (differently from what is said of the general resurrection) that their bodies arose ; because they were the same that were then lying in their graves, the moment before they rose.

But your lordship endeavours to prove it must be the same body : and let us grant that your lordship, nay, and others too, think you have proved it must be the same body ; Will you therefore say, that he holds what is inconsistent with an article of faith, who having never seen this your lordship's interpretation of the scripture, nor your reasons for the same body, in your sense of same body ; or, if he has seen them, yet not understanding them, or not perceiving the force of them, believes what the scripture proposes to him, viz. That at the last day the dead shall be raised, without determining whether it shall be with the very same bodies or no ?

I know your lordship pretends not to erect your particular interpretations of scripture into articles of faith. And if you do not, he that believes the dead shall be raised, believes that article of faith which the scripture proposes ; and cannot be accused of holding any thing inconsistent with it, if it should happen, that what he holds is inconsistent with another proposition, viz. That the dead shall be raised with the same bodies, in your lordship's sense, which I do not find proposed in Holy Writ as an article of faith.

But your lordship argues, It must be the same body ; which, as you explain same body,† is not the same individual particles of matter, which were united at the point of death ; nor the same particles of matter, that the sinner had at the time of the commission of his sins :

* Matt. xxvii. 52, 53.

† 2d Ans.

but that it must be the same material substance which was vitally united to the soul here ; i. e. as I understand it, the same individual particles of matter, which were some time or other during his life here vitally united to his soul.

Your first argument to prove, that it must be the same body in this sense of the same body, is taken from these words of our Saviour, * All that are in the graves shall hear his voice, and shall come forth.† From whence your lordship argues, That these words, all that are in their graves, relate to no other substance than what was united to the soul in life ; because a different substance cannot be said to be in the graves, and to come out of them. Which words of your lordship's, if they prove any thing, prove that the soul too is lodged in the grave, and raised out of it at the last day. For your lordship says, Can a different substance be said to be in the graves, and come out of them ? So that, according to this interpretation of these words of our Saviour, No other substance being raised, but what hears his voice ; and no other substance hearing his voice, but what being called, comes out of the grave ; and no other substance coming out of the grave, but what was in the grave ; any one must conclude, that the soul, unless it be in the grave, will make no part of the person that is raised ; unless, as your lordship argues against me,‡ You can make it out, that a substance which never was in the grave may come out of it, or that the soul is no substance.

But setting aside the substance of the soul, another thing that will make any one doubt, whether this your interpretation of our Saviour's words be necessarily to be received as their true sense, is, That it will not be very easily reconciled to your saying,|| you do not mean by the same body, The same individual particles which were united at the point of death. And yet, by this interpretation of our Saviour's words, you can mean no other particles but such as were united at the point of death ; because you mean no other substance but what comes out of the grave ; and no substance, no particles come out, you say, but what were in the grave ; and I think, your lordship will not say, that the particles that were separate from the body by perspiration before the point of death, were laid up in the grave.

But your lordship, I find, has an answer to this, viz. § That by comparing this with other places, you find that the words [of our Saviour above quoted] are to be understood of the substance of the body, to which the soul was united, and not to (I suppose your lordship writ, of) these individual particles, i. e. those individual particles that are in the grave at the resurrection. For so they must be read, to make your lordship's sense entire, and to the purpose of your answer here : and then, methinks, this last sense of our Saviour's words given by your lordship, wholly overturns the sense which we have given of them above, where from those words you press the belief of the resurrection of the same body, by this strong argument, that a substance could not, upon hearing the voice of Christ, come out of the grave, which was never in the grave. There (as far as I can understand your words) your lordship argues, that our Saviour's words are to be understood of the particles in the grave, unless, as your lordship says, one can make it out, that a substance which never was in the grave, may come out of it. And here your lordship expressly says, That

* John v. 28, 29.

† 2d Ans.

‡ Ib.

|| Ib.

§ Ib.

our Saviour's words are to be understood of the substance of that body, to which the soul was (at any time) united, and not to those individual particles that are in the grave. Which put together, seems to me to say, That our Saviour's words are to be understood of those particles only that are in the grave, and not of those particles only which are in the grave, but of others also, which have at any time been vitally united to the soul, but never were in the grave.

The next text your lordship brings to make the resurrection of the same body, in your sense, an article of faith, are these words of St. Paul; * For we must all appear before the judgment-seat of Christ; that every one may receive the things done in his body, according to that he hath done, whether it be good or bad. To which your lordship subjoins† this question: Can these words be understood of any other material substance, but that body in which these things were done? Answer. A man may suspend his determining the meaning of the apostle to be, that a sinner shall suffer for his sins in the very same body wherein he committed them; because St. Paul does not say he shall have the very same body when he suffers, that he had when he sinned. The apostle says indeed, done in his body. The body he had, and did things in, at five or fifteen, was, no doubt, his body, as much as that, which he did things in at fifty, was his body, though his body were not the very same body at those different ages: and so will the body, which he shall have after the resurrection, be his body, though it be not the very same with that, which he had at five, or fifteen, or fifty. He that at threescore is broke on the wheel for a murder he committed at twenty, is punished for what he did in his body, though the body he has, i. e. his body at threescore, be not the same, i. e. made up of the same individual particles of matter, that that body was, which he had forty years before. When your lordship has resolved with yourself, what that same immutable he is, which at the last judgment shall receive the things done in his body, your lordship will easily see, that the body he had when an embryo in the womb, when a child playing in coats, when a man marrying a wife, and when bed-ridden dying of a consumption, and at last, which he shall have after his resurrection, are each of them his body, though neither of them be the same body, the one with the other.

But farther, to your lordship's question, Can these words be understood of any other material substance, but that body in which these things were done? I answer, These words of St. Paul may be understood of another material substance, than that body in which these things were done, because your lordship teaches me, and gives me a strong reason so to understand them. Your lordship says,‡ That you do not say the same particles of matter, which the sinner had at the very time of the commission of his sins, shall be raised at the last day. And your Lordship gives this reason for it;|| For then a long sinner must have a vast body, considering the continued spending of particles by perspiration. Now, my lord, if the apostle's words, as your lordship would argue, cannot be understood of any other material substance, but that body in which these things were done; and no body, upon the removal or change of some of the particles that at any time make it up, is the same material sub-

* 2 Cor. v. 10.

† 2d Ans.

‡ Ib.

|| Ib.

stance, or the same body ; it will, I think, thence follow, that either the sinner must have all the same individual particles vitally united to his soul when he is raised, that he had vitally united to his soul when he sinned ; or else St. Paul's words here cannot be understood to mean the same body in which the things were done. For if there were other particles of matter in the body, wherein the things were done, than in that which is raised, that which is raised cannot be the same body in which they were done : unless that alone, which has just all the same individual particles when any action is done, being the same body wherein it was done, that also, which has not the same individual particles wherein that action was done, can be the same body wherein it was done ; which is in effect to make the same body sometimes to be the same, and sometimes not the same.

Your lordship thinks it suffices to make the same body, to have not all, but no other particles of matter, but such as were some time or other vitally united to the soul before : but such a body, made up of part of the particles some time or other vitally united to the soul, is no more the same body wherein the actions were done in the distant parts of the long sinner's life, than that is the same body in which a quarter, or half, or three quarters of the same particles, that made it up, are wanting. For example, A sinner has acted here in his body an hundred years ; he is raised at the last day, but with what body ? The same, says your lordship, that he acted in ; because St. Paul says, he must receive the things done in his body. What therefore must his body at the resurrection consist of ? Must it consist of all the particles of matter that have ever been vitally united to his soul ? For they, in succession, have all of them made up his body wherein he did these things : No, says your lordship,* that would make his body too vast ; it suffices to make the same body in which the things were done, that it consists of some of the particles, and no other, but such as were, some time during his life, vitally united to his soul. But according to this account, his body at the resurrection being, as your lordship seems to limit it, near the same size it was in some part of his life, it will be no more the same body in which the things were done in the distant parts of his life, than that is the same body, in which half, or three quarters, or more of the individual matter that then made it up, is now wanting. For example, Let his body at fifty years old consist of a million of parts : five hundred thousand at least of those parts will be different from those which made up his body at ten years, and at an hundred. So that to take the numerical particles, that made up his body at fifty, or any other season of his life, or to gather them promiscuously out of those which at different times have successively been vitally united to his soul, they will no more make the same body, which was his, wherein some of his actions were done, than that is the same body, which has but half the same particles : and yet all your lordship's argument here for the same body, is, because St. Paul says it must be his body, in which these things were done ; which it could not be, if any other substance were joined to it, i. e. if any other particles of matter made up the body, which were not vitally united to the soul when the action was done.

* 2d Ans.

Again, your lordship says, * ‘That you do not say the same individual particles [shall make up the body at the resurrection] which were united at the point of death, for there must be a great alteration in them in a lingering disease, as if a fat man falls into a consumption.’ Because, it is likely, your lordship thinks these particles of a decrepit, wasted, withered body, would be too few, or unfit to make such a plump, strong, vigorous, well sized body, as it has pleased your lordship to proportion out in your thoughts to men at the resurrection; and therefore some small portion of the particles formerly united vitally to that man’s soul, shall be reassumed to make up his body to the bulk your lordship judges convenient; but the greatest part of them shall be left out, to avoid the making his body more vast than your lordship thinks will be fit, as appears by these your lordship’s words immediately following, viz. † ‘That you do not say the same particles the sinner had at the very time of commission of his sins; for then a long sinner must have a vast body.’

But then, pray, my lord, what must an embryo do, who dying within a few hours after his body was vitally united to his soul, has no particles of matter, which were formerly vitally united to it, to make up his body of that size and proportion which your lordship seems to require in bodies at the resurrection? Or must we believe he shall remain content with that small pittance of matter, and that yet imperfect body to eternity, because it is an article of faith to believe the resurrection of the very same body, i. e. made up of only such particles as have been vitally united to the soul? For if it be so, as your lordship says, ‡ ‘That life is the result of the union of soul and body,’ it will follow, that the body of an embryo dying in the womb may be very little, not the thousandth part of any ordinary man. For since from the first conception and beginning of formation it has life, and ‘life is the result of the union of the soul with the body;’ an embryo, that shall die either by the untimely death of the mother, or by any other accident, presently after it has life, must, according to your lordship’s doctrine, remain a man not an inch long to eternity; because there are not particles of matter, formerly united to his soul, to make him bigger, and no other can be made use of to that purpose: though what greater congruity the soul hath with any particles of matter which were once vitally united to it, but are now so no longer, than it hath with particles of matter which it was never united to, would be hard to determine, if that should be demanded.

By these, and not a few other the like consequences, one may see what service they do to religion, and the christian doctrine, who raise questions, and make articles of faith about the resurrection of the same body, where the scripture says nothing of the same body; or if it does, it is with no small reprimand § to those who make such an enquiry. ‘But some men will say, How are the dead raised up? and with what body do they come? Thou fool, that which thou sowest, is not quickened except it die. And that which thou sowest, thou sowest not that body that shall be, but bare grain, it may chance of wheat, or of some other grain. But God giveth it a body, as it hath pleased him.’ Words, I should think, sufficient to deter us from determining any thing for or against the same body’s being raised at the

* 2d Ans. † Ibid. ‡ Ibid. § 1 Cor. xv. 35, &c.

last day. It suffices, that all the dead shall be raised, and every one appear and answer for the things done in his life, and receive according to the things he has done in his body, whether good or bad. He that believes this, and has said nothing inconsistent herewith, I presume may and must be acquitted from being guilty of any thing inconsistent with the article of the resurrection of the dead.

But your lordship, to prove the resurrection of the same body to be an article of faith, farther asks, * ‘How could it be said, if any other substance be joined to the soul at the resurrection, as its body, that they were the things done in or by the body?’ Answ. Just as it may be said of a man at an hundred years old, that hath then another substance joined to his soul, than he had at twenty; that the murder or drunkenness he was guilty of at twenty, were things done in the body: how ‘by the body’ comes in here, I do not see.

Your lordship adds, ‘and St. Paul’s dispute about the manner of raising the body, might soon have ended, if there were no necessity of the same body.’ Answ. When I understand what argument there is in these words to prove the resurrection of the same body, without the mixture of one new atom of matter, I shall know what to say to it. In the mean time this I understand, that St. Paul would have put as short an end to all disputes about this matter, if he had said, that there was a necessity of the same body, or that it should be the same body.

The next text of scripture you bring for the same body is, † ‘If there be no resurrection of the dead, then is not Christ raised.’ From which your lordship argues, ‡ ‘It seems then other bodies are to be raised as his was.’ I grant other dead, as certainly raised as Christ was; for else his resurrection would be of no use to mankind. But I do not see how it follows, that they shall be raised with the same body, as Christ was raised with the same body, as your lordship infers in these words annexed: ‘And can there be any doubt, whether his body was the same material substance which was united to his soul before?’ I answer, None at all; nor that it had just the same distinguishing lineaments and marks, yea, and the same wounds that it had at the time of his death. If therefore your lordship will argue from other bodies being raised as his was, That they must keep proportion with his in sameness; then we must believe, that every man shall be raised with the same lineaments and other notes of distinction he had at the time of his death, even with his wounds yet open, if he had any, because our Saviour was so raised; which seems to me scarce reconcilable with what your lordship says, § of a fat man falling into a consumption, and dying.

But whether it will consist or no with your lordship’s meaning in that place, this to me seems a consequence that will need to be better proved, viz. That our bodies must be raised the same, just as our Saviour’s was: because St. Paul says, ‘if there be no resurrection of the dead, then is not Christ risen.’ For it may be a good consequence, Christ is risen, and therefore there shall be a resurrection of the dead; and yet this may not be a good consequence, Christ was raised with the same body he had at his death, therefore all men shall be raised with the same body they had at their death, contrary to what your lordship says concerning a fat man dying of a consump-

* 2d Ans. † 2 Cor. xv. 16. ‡ 2d Ans. § Ibid.

tion. But the case I think far different betwixt our Saviour, and those to be raised at the last day.

1. His body saw not corruption, and therefore to give him another body new moulded, mixed with other particles, which were not contained in it as it lay in the grave, whole and intire as it was laid there, had been to destroy his body to frame him a new one without any need. But why with the remaining particles of a man's body long since dissolved and mouldered into dust and atoms (whereof possibly a great part may have undergone variety of changes, and entered into other concretions; even in the bodies of other men) other new particles of matter mixed with them, may not serve to make his body again, as well as the mixture of new and different particles of matter with the old, did in the compass of his life make his body, I think no reason can be given.

This may serve to show, why, though the materials of our Saviour's body were not changed at his resurrection; yet it does not follow, but that the body of a man dead and rotten in his grave, or burnt, may at the last day have several new particles in it, and that without any inconvenience: since whatever matter is vitally united to his soul is his body, as much as is that which was united to it when he was born, or in any other part of his life.

2. In the next place, the size, shape, figure, and lineaments of our Saviour's body, even to his wounds, into which doubting Thomas put his fingers and his hand, were to be kept in the raised body of our Saviour, the same they were at his death, to be a conviction to his disciples, to whom he shewed himself, and who were to be witnesses of his resurrection, that their master, the very same man, was crucified, dead, and buried, and raised again; and therefore he was handled by them, and eat before them after he was risen, to give them in all points full satisfaction that it was really he, the same, and not another, nor a spectre or apparition of him; though I do not think your lordship will thence argue, that because others are to be raised as he was, therefore it is necessary to believe, that because he eat after his resurrection, others at the last day shall eat and drink after they are raised from the dead; which seems to me as good an argument, as because his undissolved body was raised out of the grave, just as it there lay intire, without the mixture of any new particles; therefore the corrupted and consumed bodies of the dead, at the resurrection, shall be new framed only out of those scattered particles which were once vitally united to their souls, without the least mixture of any one single atom of new matter. But at the last day, when all men are raised, there will be no need to be assured of any one particular man's resurrection. It is enough that every one shall appear before the judgment-seat of Christ, to receive according to what he had done in his former life; but in what sort of body he shall appear, or of what particles made up, the scripture having said nothing, but that it shall be a spiritual body raised in incorruption, it is not for me to determine.

Your lordship asks, * ' Were they [who saw our Saviour after his resurrection] witnesses only of some material substance then united to his soul ?' In answer, I beg your lordship to consider, whether

* 2d Ans.

2 A 2

you suppose our Saviour was to be known to be the same man (to the witnesses that were to see him, and testify his resurrection) by his soul, that could neither be seen or known to be the same; or by his body, that could be seen, and by the discernible structure and marks of it, be known to be the same? When your lordship has resolved that, all that you say in that page will answer itself. But because one man cannot know another to be the same, but by the outward visible lineaments, and sensible marks he has been wont to be known and distinguished by, will your lordship therefore argue, That the Great Judge, at the last day, who gives to each man, whom he raises, his new body, shall not be able to know who is who, unless he give to every one of them a body, just of the same figure, size, and features, and made up of the very same individual particles he had in his former life? Whether such a way of arguing for the resurrection of the same body, to be an article of faith, contributes much to the strengthening of the credibility of the article of the resurrection of the dead, I shall leave to the judgment of others.

Farther, for the proving the resurrection of the same body, to be an article of faith, your lordship says, * ‘ But the apostle insists upon the resurrection of Christ, not merely as an argument of the possibility of ours, but of the certainty of it; † because he rose, as the first-fruits; Christ the first-fruits, afterwards they that are Christ’s at his coming.’ Answer. No doubt, the resurrection of Christ is a proof of the certainty of our resurrection. But is it therefore a proof of the resurrection of the same body, consisting of the same individual particles which concurred to the making up of our body here, without the mixture of any one other particle of matter? I confess I see no such consequence.

But your lordship goes on: ‡ ‘ St. Paul was aware of the objections in men’s minds about the resurrection of the same body; and it is of great consequence as to this article, to show upon what grounds he proceeds. ‘ But some men will say, how are the dead raised up, and with what body do they come?’ First, he shows, that the seminal parts of plants are wonderfully improved by the ordinary Providence of God, in the manner of their vegetation.’ Answer. I do not perfectly understand, what it is ‘ for the seminal parts of plants to be wonderfully improved by the ordinary Providence of God, in the manner of their vegetation;’ or else, perhaps, I should better see how this here tends to the proof of the resurrection of the same body, in your lordship’s sense.

It continues, || ‘ They sow bare grain of wheat, or of some other grain, but God giveth it a body, as it hath pleased him, and to every seed his own body. Here, says your lordship, is an identity of the material substance supposed.’ It may be so. But to me a diversity of the material substance, i. e. of the component particles, is here supposed, or in direct words said. For the words of St. Paul taken altogether, run thus, § ‘ That which thou sowest, thou sowest not that body which shall be, but bare grain;’ and so on, as your lordship has set down in the remainder of them. From which words of St. Paul, the natural argument seems to me to stand thus: If the body that is put in the earth in sowing, is not that body which shall be, then the body that is put in the grave, is not that, i. e. the same body that shall be.

* 2d Ans.

† 1 Cor. xv. 20, 23.

‡ 2d Ans.

|| Ibid.

§ V. 37.

But your lordship proves it to be the same body by these three Greek words of the text, *το ἴδιον σῶμα*, which your lordship interprets thus, * ‘That proper body which belongs to it.’ Answer. Indeed by those Greek words *το ἴδιον σῶμα*, whether our translators have rightly rendered them ‘his own body,’ or your lordship more rightly ‘that proper body which belongs to it,’ I formerly understood no more but this, that in the production of wheat, and other grain from seed, God continued every species distinct : so that from grains of wheat sown, root, stalk, blade, ear, grains of wheat were produced, and not those of barley ; and so of the rest, which I took to be the meaning of ‘to every seed his own body.’ No, says your lordship, these words prove, That to every plant of wheat, and to every grain of wheat produced in it, is given the proper body that belongs to it, which is the same body with the grain that was sown. Answer. This, I confess, I do not understand ; because I do not understand how one individual grain can be the same with twenty, fifty, or an hundred individual grains ; for such sometimes is the increase.

But your lordship proves it. For, says your lordship, † ‘ Every seed having that body in little, which is afterwards so much enlarged ; and in grain the seed is corrupted before its germination ; but it hath its proper organical parts, which make it the same body with that which it grows up to. For although grain be not divided into lobes, as other seeds are, yet it hath been found, by the most accurate observations, that upon separating the membranes, these seminal parts are discerned in them ; which afterwards grow up to that body which we call corn. In which words I crave leave to observe, that your lordship supposes that a body may be enlarged by the addition of an hundred or a thousand times as much in bulk as its own matter, and yet continue the same body ; which, I confess, I cannot understand.

But in the next place, if that could be so ; and that the plant, in its full growth at harvest, increased by a thousand or a million of times as much new matter added to it, as it had when it lay in little concealed in the grain that was sown, was the very same body ; yet I do not think that your lordship will say, that every minute, insensible, and inconceivably small grain of the hundred grains, contained in that little organized seminal plant, is every one of them the very same with that grain which contains that whole seminal plant, and all those invisible grains in it. For then it will follow, that one grain is the same with an hundred, and an hundred distinct grains the same with one : which I shall be able to assent to, when I can conceive, that all the wheat in the world is but one grain.

For I beseech you, my lord, consider what it is St. Paul here speaks of : it is plain he speaks of that which is sown and dies, i. e. the grain that the husbandman takes out of his barn to sow in his field. And of this grain St. Paul says, ‘ that it is not that body that shall be.’ These two, viz. ‘ that which is sown, and that body that shall be,’ are all the bodies that St. Paul here speaks of, to represent the agreement or difference of men’s bodies after the resurrection, with those they had before they died. Now, I crave leave to ask your lordship, which of these two is that little invisible seminal plant, which your lordship here speaks of?

* 2d Ans.

† Ibid.

Does your lordship mean by it the grain that is sown? But that is not what St. Paul speaks of; he could not mean this embryonated little plant, for he could not denote it by these words, 'that which thou sowest,' for that he says must die: but this little embryonated plant contained in the seed that is sown dies not: or does your lordship mean by it, 'the body that shall be?' But neither by these words, 'the body that shall be,' can St. Paul be supposed to denote this insensible little embryonated plant; for that is already in being, contained in the seed that is sown, and therefore could not be spoken of under the name of the body that shall be. And therefore, I confess, I cannot see of what use it is to your lordship to introduce here this third body, which St. Paul mentions not, and to make that the same, or not the same with any other, when those which St. Paul speaks of, are, as I humbly conceive, these two visible sensible bodies, the grain sown, and the corn grown up to ear; with neither of which this insensible embryonated plant can be the same body, unless an insensible body can be the same body with a sensible body, and a little body can be the same body with one ten thousand, or an hundred thousand times as big as itself. So that yet, I confess, I see not the resurrection of the same body proved, from these words of St. Paul, to be an article of faith.

Your lordship goes on: * 'St. Paul indeed saith, That we sow not that body that shall be; but he speaks not of the identity, but the perfection of it.' Here my understanding fails me again: for I cannot understand St. Paul to say, That the same identical sensible grain of wheat, which was sown at seed-time, is the very same with every grain of wheat in the ear at harvest, that sprang from it: yet so I must understand it, to make it prove, that the same sensible body that is laid in the grave, shall be the very same with that which shall be raised at the resurrection. For I do not know of any seminal body in little, contained in the dead carcase of any man or woman, which, as your lordship says, in seeds, having its proper organical parts, shall afterwards be enlarged, and at the resurrection grow up into the same man. For I never thought of any seed or seminal parts, either of plant or animal, 'so wonderfully improved by the Providence of God,' whereby the same plant or animal should beget itself; nor ever heard, that it was by Divine Providence designed to produce the same individual, but for the producing of future and distinct individuals, for the continuation of the same species.

Your lordship's next words are, † 'And although there be such a difference from the grain itself, when it comes up to be perfect corn, with root, stalk, blade, and ear, that it may be said to outward appearance not to be the same body; yet with regard to the seminal and organical parts it is as much the same, as a man grown up, is the same with the embryo in the womb.' Answer. It does not appear, by any thing I can find in the text, that St. Paul here compared the body produced, with the seminal and organical parts contained in the grain it sprang from, but with the whole sensible grain that was grown. Microscopes had not then discovered the little embryo plant in the seed: and supposing it should have been revealed to St. Paul (though in the scripture we find little revelation of natural philosophy) yet an argument taken from a thing perfectly unknown to the Corinthians, whom he writ to, could be of no

* 2d Ans.

† Ibid.

manner of use to them; nor serve at all either to instruct or convince them. But granting that those St. Paul writ to, knew it as well as Mr. Lewenhoeck; yet your lordship thereby proves not the raising of the same body: your lordship says, it is as much the same (I crave leave to add body) 'as a man grown up is the same' (same what, I beseech your lordship?) 'with the embyro in the womb.' For that the body of the embryo in the womb, and body of the man grown up, is the same body, I think no one will say; unless he can persuade himself, that a body that is not the hundredth part of another, is the same with that other; which I think no one will do, till having renounced this dangerous way by ideas of thinking and reasoning, he has learnt to say, that a part and the whole are the same.

Your lordship goes on: * 'And although many arguments may be used to prove, that a man is not the same, because life, which depends upon the course of the blood, and the manner of respiration and nutrition, is so different in both states; yet that man would be thought ridiculous, that should seriously affirm, that it was not the same man. And your lordship says, I grant that the variation of great parcels of matter in plants, alters not the identity; and that the organization of the parts in one coherent body, partaking of one common life, makes the identity of a plant.' Answer. My lord, I think the question is not about the same man, but the same body. For though I do say, † (somewhat differently from what your lordship sets down as my words here) 'That that which 'has such an organization, as is fit to receive and distribute nourishment, 'so as to continue and frame the wood, bark, and leaves, &c. of a plant, 'in which consists the vegetable life, continues to be the same plant, as 'long as it partakes of the same life, though that life be communicated 'to new particles of matter, vitally united to the living plant:' yet I do not remember, that I any where say, that a plant, which was once no bigger than an oaten straw, and afterwards grows to be above a fathom about, is the same body, though it be still the same plant.

The well-known tree in Epping forest, called the King's Oak, which from not weighing an ounce at first, grew to have many tons of timber in it, was all along the same oak, the very same plant; but nobody, I think, will say that it was the same body when it weighed a ton, as it was when it weighed but an ounce, unless he has a mind to signalize himself by saying, that that is the same body, which has a thousand particles of different matter in it, for one particle that is the same; which is no better than to say, that a thousand different particles are but one and the same particle, and one and the same particle is a thousand different particles; a thousand times a greater absurdity, than to say half is whole, or the whole is the same with the half; which will be improved ten thousand times yet farther, if a man shall say (as your lordship seems to me to argue here) that that great oak is the very same body with the acorn it sprang from, because there was in that acorn an oak in little, which was afterwards as your lordship expresses it) so much enlarged, as to make that mighty tree. For this embryo, if I may so call it, or oak in little, being not the hundredth, or perhaps the thousandth part of the acorn, and the acorn being not the thousandth part of the grown oak, it will be very extraordinary to prove the acorn and the grown oak to be the same body, by a way wherein it cannot be

* 2d Ans.

† Essay, b. 2. c. 27. § 4.

pretended, that above one particle of an hundred thousand, or a million, is the same in the one body, that it was in the other. From which way of reasoning, it will follow, that a nurse and her sucking child have the same body, and be past doubt, that a mother and her infant have the same body. But this is a way of certainty found out to establish the articles of faith, and to overturn the new method of certainty that your lordship says 'I have started, which is apt to leave men's minds more doubtful than before.'

And now I desire your lordship to consider of what use it is to you in the present case, to quote out of my Essay these words, 'That partaking of one common life, makes the identity of a plant;' since the question is not about the identity of a plant, but about the identity of a body; it being a very different thing to be the same plant, and to be the same body. For that which makes the same plant, does not make the same body; the one being the partaking in the same continued vegetable life, the other the consisting of the same numerical particles of matter. And therefore your lordship's inference from my words above quoted, in these which you subjoin,* seems to me a very strange one, viz. 'So that in things capable of any sort of life, the identity is consistent with a continued succession of parts; and so the wheat grown up, is the same body with the grain that was sown.' For I believe, if my words, from which you infer, 'And so the wheat grown up is the same body with the grain that was sown,' were put into a syllogism, this would hardly be brought to be the conclusion.

But your lordship goes on with consequence upon consequence, though I have not eyes acute enough every where to see the connexion, till you bring it to the resurrection of the same body. The connexion of your lordship's words † is as followeth; 'And thus the alteration of the parts of the body at the resurrection is consistent with its identity, if its organization and life be the same; and this is a real identity of the body, which depends not upon consciousness. From whence it follows, that to make the same body, no more is required, but restoring life to the organized parts of it.' If the question were about raising the same plant, I do not say but there might be some appearance for making such an inference from my words as this, 'Whence it follows, that to make the same plant, no more is required, but to restore life to the organized parts of it.' But this deduction, wherein, from those words of mine that speak only of the identity of a plant, your lordship infers, there is no more required to make the same body, than to make the same plant, being too subtle for me, I leave to my reader to find out.

Your lordship goes on and says, ‡ that I grant likewise, 'That the identity of the same man consists in a participation of the same continued life, by constantly flecting particles of matter in succession, vitally united to the same organized body.' Answer. I speak in these words of the identity of the same man, and your lordship thence roundly concludes; 'so that there is no difficulty of the sameness of the body.' But your lordship knows, that I do not take these two sounds, man and body, to stand for the same thing, nor the identity of the man to be the same with the identity of the body.

But let us read out your lordship's words. § 'So that there is no difficulty as to the sameness of the body, if life were continued; and

* 2d Ans.

† Ibid.

‡ Ibid.

§ Ibid.

if, by divine power, life be restored to that material substance which was before united, by a reunion of the soul to it, there is no reason to deny the identity of the body, not from the consciousness of the soul, but from that life which is the result of the union of the soul and body.'

If I understand your lordship right, you in these words, from the passages above quoted out of my book, argue, that from those words of mine it will follow, that it is or may be the same body, that is raised at the resurrection. If so, my lord, your lordship has then proved, that my book is not inconsistent with, but conformable to this article of the resurrection of the same body, which your lordship contends for, and will have to be an article of faith: for though I do by no means deny that the same bodies shall be raised at the last day, yet I see nothing your lordship has said to prove it to be an article of faith.

But your lordship goes on with your proofs, and says, * 'But St. Paul still supposes, that it must be that material substance to which the soul was before united. For, saith he, "it is sown in corruption, it is raised in incorruption; it is sown in dishonour, it is raised in glory; it is sown in weakness, it is raised in power; it is sown a natural body, it is raised a spiritual body." Can such a material substance, which was never united to the body, be said to be sown in corruption, and weakness, and dishonour? Either, therefore, he must speak of the same body, or his meaning cannot be comprehended.' I answer, 'Can such a material substance, which was never laid in the grave, be said to be sown,' &c.? For your lordship says, † 'You do not say the same individual particles, which were united at the point of death, shall be raised at the last day;' and no other particles are laid in the grave, but such as are united at the point of death; either therefore your lordship must speak of another body, different from that which was sown, which shall be raised, or else your meaning, I think, cannot be comprehended.

But whatever be your meaning, your lordship proves it to be St. Paul's meaning, that the same body shall be raised, which was sown, in these following words, ‡ 'For what does all this relate to a conscious principle?' Answer. The scripture being express, that the same person should be raised and appear before the judgment-seat of Christ, that every one may receive according to what he had done in his body; it was very well suited to common apprehensions (which refined not about 'particles that had been vitally united to the soul') to speak of the body which each one was to have after the resurrection, as he would be apt to speak of it himself. For it being his body both before and after the resurrection, every one ordinarily speaks of his body as the same, though in a strict and philosophical sense, as your lordship speaks, it be not the very same. Thus it is no impropriety of speech to say, 'this body of mine, which was formerly strong and plump, is now weak and wasted,' though in such a sense as you are speaking here, it be not the same body. Revelation declares nothing any where concerning the same body, in your lordship's sense of the same body, which appears not to have been thought of. The apostle directly proposes nothing for or against the same body, as necessary to be believed: that which he is plain and direct in, is his opposing and condemning such curious questions about the body, which could serve only to perplex, not to confirm what was material and necessary for them to believe, viz. a day of judgment and retribution to men in a future state; and therefore it is no wonder, that mentioning their bodies, he

† 2d Ans.

† Ibid.

‡ Ibid.

should use a way of speaking suited to vulgar notions, from which it would be hard positively to conclude any thing for the determining of this question (especially against expressions in the same discourse that plainly incline to the other side) in a matter which, as it appears, the apostle thought not necessary to determine, and the spirit of God thought not fit to gratify any one's curiosity in.

But your lordship says, * 'The apostle speaks plainly of that body which was once quickened, and afterwards falls to corruption, and is to be restored with more noble qualities. I wish your lordship had quoted the words of St. Paul, wherein he speaks plainly of that numerical body that was once quickened; they would presently decide this question. But your lordship proves it by these following words of St. Paul: 'For this corruption must put on incorruption, and this mortal must put on immortality;' to which your lordship adds, 'that you do not see how he could more expressly affirm the identity of this corruptible body, with that after the resurrection.' How expressly it is affirmed by the apostle, shall be considered by and by. In the mean time, it is past doubt, that your lordship best knows what you do or do not see. But this I would be bold to say, that if St. Paul had any where in this chapter (where there are so many occasions for it, if it had been necessary to have been believed) but said in express words that the same bodies should be raised, every one else, who thinks of it, will see he had more expressly affirmed the identity of the bodies which men now have, with those they shall have after the resurrection.

The remainder of your lordship's period† is; 'And that without any respect to the principle of self-consciousness.' Ans. These words, I doubt not, have some meaning, but I must own I know not what; either towards the proof of the resurrection of the same body, or to show, that any thing I have said concerning self-consciousness, is inconsistent: for I do not remember that I have any where said, that the identity of body consisted in self-consciousness.

From your preceding words, your lordship concludes thus: ‡ 'And so if the scripture be the sole foundation of our faith, this is an article of it.' My lord, to make the conclusion unquestionable, I humbly conceive the words must run us: 'And so if the scripture, and your lordship's interpretation of it, be the sole foundation of our faith, the resurrection of the same body is an article of it.' For, with submission, your lordship has neither produced express words of scripture for it, nor so proved that to be the meaning of any of those words of scripture which you have produced for it, that a man who reads and sincerely endeavours to understand the scripture, cannot but find himself obliged to believe, as expressly, 'that the same bodies of the dead,' in your lordship's sense, shall be raised, as 'that the dead shall be raised.' And I crave leave to give your lordship this one reason for it. He who reads with attention this discourse of St. Paul § where he discourses of the resurrection, will see, that he plainly distinguishes between the dead that shall be raised, and the bodies of the dead. For it is *οἱ νεκροί, πάντες, οἱ* are the nominative cases to *|| ὑγιαίνοντες, ζωνοποιήσονται, ἐγερθήσονται*, all along, and not *σώματα*, bodies; which one may with reason think would somewhere or other have been ex-

* 2d Ans.

† Ibid.

‡ Ibid.

§ 1 Cor. xv.

|| V. 15, 22, 23, 29, 32, 35, 52.

expressed, if all this had been said to propose it as an article of faith, that the very same bodies should be raised. The same manner of speaking the spirit of God observes all through the New Testament, where it is said, * 'raise the dead, quicken or make alive the dead, the resurrection of the dead.' Nay, these very words of our Saviour, † urged by your lordship for the resurrection of the same body, run thus, Πάντες οἱ ἐν τοῖς μνημείοις ἀκύνονται τῇ φωνῇ αὐτοῦ καὶ ἐκπορεύονται, οἱ τὰ ἀγαθαὶ ποιήσαντες εἰς ἀνάστασιν ζωῆς, οἱ δὲ τὰ φαῦλα πράξαντες εἰς ἀνάστασιν κρίσεως. Would not a well-meaning searcher of the scriptures be apt to think, that if the thing here intended by our Saviour were to teach, and propose it as an article of faith, necessary to be believed by every one, that the very same bodies of the dead should be raised; would not, I say, any one be apt to think, that if our Saviour meant so, the words should rather have been, πάντα τὰ σώματα ἃ ἐν τοῖς μνημείοις, i. e. 'all the bodies that are in the graves,' rather than 'all who are in the graves;' which must denote persons, and not precisely bodies?

Another evidence, that St. Paul makes a distinction between the dead and the bodies of the dead, so that the dead cannot be taken in this, 1 Cor. xv. to stand precisely for the bodies of the dead, are these words of the apostle, ‡ 'But some man will say, how are the dead raised? And with what bodies do they come?' Which words, 'dead' and 'they,' if supposed to stand precisely for the bodies of the dead, the question will run thus: 'How are the dead bodies raised? And with what bodies do the dead bodies come?' Which seems to have no very agreeable sense.

It is therefore being so, that the Spirit of God keeps so expressly to this phrase, or form of speaking in the New Testament, 'of raising, quickening, rising, resurrection, &c. of the dead, where the resurrection of the last day is spoken of; and that the body is not mentioned, but in answer to this question, 'With what bodies shall those dead, who are raised, come?' so that by the dead cannot precisely be meant the dead bodies: I do not see but a good christian, who reads the scripture with an intention to believe all that is there revealed to him concerning the resurrection, may acquit himself of his duty therein, without entering into the inquiry, whether the dead shall have the very same bodies or no? Which sort of inquiry the apostle, by the appellation he bestows here on him that makes it, seems not much to encourage. Nor, if he shall think himself bound to determine concerning the identity of the bodies of the dead raised at the last day, will he, by the remainder of St. Paul's answer, find the determination of the Apostle to be much in favour of the very same body; unless the being told, that the body sown, is not that body that shall be; that the body raised is as different from that which was laid down, as the flesh of man is from the flesh of beasts, fishes, and birds; or as the sun, moon, and stars are different one from another; or as different as a corruptible, weak, natural, mortal body, is from an incorruptible, powerful, spiritual, immortal body; and lastly, as different as a body that is flesh and blood, is from a body that is not flesh and blood; 'for flesh and blood cannot, says St. Paul, in this very place, || inherit the king-

* Matt. xxii. 31. Mark xii. 26. John v. 21. Acts xvi. 7. Rom. iv. 17. 2 Cor. i. 9. 1 Thess. iv. 14, 16.

† John v. 28, 29.

‡ Ver. 35.

|| V. 50.

dom of God :’ unless, I say, all this, which is contained in St. Paul’s words, can be supposed to be the way to deliver this as an article of faith, which is required to be believed by every one, viz, ‘ That the dead should be raised with the very same bodies that they had before in this life ;’ which article proposed in these or the like plain and express words, could have left no room for doubt in the meanest capacities, nor for contest in the most perverse minds.

Your lordship adds in the next words,* ‘ And so it hath been always understood by the christian church, viz. That the resurrection of the same body, in your lordship’s sense of the same body, is an article of faith.’ Answer. What the christian church has always understood, is beyond my knowledge. But for those who, coming short of your lordship’s great learning, cannot gather their articles of faith from the understanding of all the whole christian church, ever since the preaching of the gospel, (who make the far greater part of christians, I think I may say nine hundred ninety and nine of a thousand) but are forced to have recourse to the scripture to find them there, I do not see, that they will easily find there this proposed as an article of faith, that there shall be a resurrection of the same body ; but that there shall be a resurrection of the dead, without explicitly determining, That they shall be raised with bodies made up wholly of the same particles which were once vitally united to their souls in their former life, without the mixture of any one other particle of matter ; which is that which your lordship means by the same body.

But supposing your lordship to have demonstrated this to be an article of faith, though I crave leave to own, that I do not see, that all that your lordship has said here makes it so much as probable ; What is all this to me ? Yes, says your lordship in the following words,† ‘ My idea of personal identity is inconsistent with it, for it makes the same body which was here united to the soul, not to be necessary to the doctrine of the resurrection. But any material substance united to the same principle of consciousness, makes the same body.’

This is an argument of your lordship’s which I am obliged to answer to. But is it not fit I should first understand it, before I answer it ? Now here I do not well know, what it is ‘ to make a thing not to be necessary to the doctrine of the resurrection.’ But to help myself out the best I can, with a guess, I will conjecture (which, in disputing with learned men, is not very safe) your lordship’s meaning is, that ‘ my idea of personal identity makes it not necessary,’ that for the raising the same person, the body should be the same.

Your lordship’s next word is ‘ but ;’ to which I am ready to reply, But what ? What does my idea of personal identity do ? For something of that kind the adversative particle ‘ but ’ should, in the ordinary construction of our language, introduce, to make the proposition clear and intelligible : but here is no such thing. ‘ But,’ is one of your lordship’s privileged particles, which I must not meddle with, for fear your lordship complain of me again, ‘ as so severe a critic, that for the least ambiguity in any particle I fill up pages in my answer, to make my book look considerable for the bulk of it.’ But since this proposition here, ‘ my idea of personal identity makes the same body which was here united to the soul, not necessary to the doctrine of the resurrection : But any material substance being united to the same principle of consciousness, makes the same body,’ is brought to prove

* 2d Ans.

† Ibid.

my idea of personal identity inconsistent with the article of the resurrection; I must make it out in some direct sense or other, that I may see whether it be both true and conclusive. I therefore venture to read it thus: 'My idea of personal identity makes the same body which was here united to the soul, not to be necessary at the resurrection; but allows, that any material substance being united to the same principle of consciousness, makes the same body. Ergo, my idea of personal identity is inconsistent with the article of the resurrection of the same body.'

If this be your lordship's sense in this passage, as I here have guessed it to be, or else I know not what it is, I answer,

1. That my idea of personal identity does not allow, that any material substance, being united to the same principle of consciousness, makes the same body. I say no such thing in my book, nor any thing from whence it may be inferred; and your lordship would have done me a favour to have set down the words where I say so, or those from which you infer so, and showed how it follows from any thing I have said.

2. Granting, that it were a consequence from my idea of personal identity, that 'any material substance, being united to the same principle of consciousness, makes the same body;' this would not prove that my idea of personal identity was inconsistent with this proposition, 'that the same body shall be raised;' but, on the contrary, affirms it: since, if I affirm, as I do, that the same person shall be raised, and it be a consequence of my idea of personal identity, that 'any material substance, being united to the same principle of consciousness, makes the same body;' it follows, that if the same person be raised, the same body must be raised; and so I have herein not only said nothing inconsistent with the resurrection of the same body, but have said more for it than your lordship. For there can be nothing plainer, than that in the scripture it is revealed, that the same persons shall be raised, and appear before the judgment-seat of Christ, to answer for what they have done in their bodies. If therefore whatever matter be joined to the same principle of consciousness makes the same body, it is demonstration, that if the same persons are raised, they have the same bodies.

How then your lordship makes this an inconsistency with the resurrection, is beyond my conception. 'Yes,' says your lordship, * 'it is inconsistent with it, for it makes the same body which was here united to the soul, not to be necessary.'

3. I answer, therefore, Thirdly, That this is the first time I ever learnt, that 'not necessary' was the same with 'inconsistent.' I say, that a body made up of the same numerical parts of matter, is not necessary to the making of the same person; from whence it will indeed follow, that to the resurrection of the same person, the same numerical particles of matter are not required. What does your lordship infer from hence? To wit, this: Therefore he who thinks, that the same particles of matter are not necessary to the making of the same person, cannot believe, that the same persons shall be raised with bodies made of the very same particles of matter, if God should reveal, that it shall be so, viz. That the same persons shall be raised with the same bodies they had before. Which is all one as to say, that he who thought the blowing of rams horns was not necessary in itself to the falling down

of the walls of Jericho, could not believe, that they should fall upon the blowing of rams horns, when God had declared it should be so.

Your lordship says, 'my idea of personal identity is inconsistent with the article of the resurrection:' the reason you ground it on, is this, because it makes not the same body necessary to the making the same person. Let us grant your lordship's consequence to be good, what will follow from it? No less than this, that your lordship's notion (for I dare not say your lordship has any so dangerous things as ideas) of personal identity, is inconsistent with the article of the resurrection. The demonstration of it is thus: your lordship says, * 'It is not necessary that the body to be raised at the last day, should consist of the same particles of matter which were united at the point of death: for there must be a great alteration in them in a lingering disease, as if a fat man falls into a consumption: you do not say the same particles which the sinner had at the very time of commission of his sins; for then a long sinner must have a vast body, considering the continual spending of particles by perspiration.' And again, here your lordship says,† 'You allow the notion of personal identity to belong to the same man under several change of matter.' From which words it is evident, that your lordship supposes a person in this world may be continued and preserved the same in a body not consisting of the same individual particles of matter; and hence it demonstratively follows, That let your lordship's notion of personal identity be what it will, it makes 'the same body not to be necessary to the same person;' and therefore it is by your lordship's rule inconsistent with the article of the resurrection. When your lordship shall think fit to clear your own notion of personal identity from this inconsistency with the article of the resurrection, I do not doubt but my idea of personal identity will be thereby cleared too. Till then, all inconsistency with that article, which your lordship has here charged on mine, will unavoidably fall upon your lordship's too.

But for the clearing of both, give me leave to say, my lord, that whatsoever is not necessary, does not thereby become inconsistent. It is not necessary to the same person, that his body should always consist of the same numerical particles; this is demonstration, because the particles of the bodies of the same persons in this life change every moment, and your lordship cannot deny it: and yet this makes it not inconsistent with God's preserving, if he thinks fit, to the same persons, bodies consisting of the same numerical particles always from the resurrection to eternity. And so likewise though I say any thing that supposes it not necessary, that the same numerical particles, which were vitally united to the soul in this life, should be reunited to it at the resurrection, and constitute the body it shall then have; yet it is not inconsistent with this, that God may, if he pleases, give to every one a body consisting only of such particles as were before vitally united to his soul. And thus, I think, I have cleared my book from all that inconsistency which your lordship charges on it, and would persuade the world it has with the article of the resurrection of the dead.

Only before I leave it, I will set down the remainder of what your lordship says upon this head, that though I see not the coherence nor tendency of it, nor the force of any argument in it against me; yet that nothing may be omitted that your lordship has thought fit to entertain

† 2d Ans.

† Ibid.

your reader with on this new point, nor any one have reason to suspect, that I have passed by any word of your lordship's, (on this now first introduced subject) wherein he might find your lordship had proved what you had promised in your title-page. Your remaining words are these; * 'The dispute is not how far personal identity in itself may consist in the very same material substance; for we allow the notion of personal identity to belong to the same man under several changes of matter; but whether it doth not depend upon a vital union between the soul and body, and the life, which is consequent upon it; and therefore in the resurrection, the same material substance must be re-united, or else it cannot be called a resurrection, but a renovation, i. e. it may be a new life, but not a raising the body from the dead.' I confess, I do not see how what is here ushered in by the words 'and therefore,' is a consequence from the preceding words: but as to the propriety of the name, I think it will not be much questioned, that if the same man rise who was dead, it may very properly be called the resurrection of the dead; which is the language of the scripture.

I must not part with this article of the resurrection, without returning my thanks to your lordship for making me † take notice of a fault in my Essay. When I wrote that book, I took it for granted, as I doubt not but many others have done, that the scripture had mentioned, in express terms, 'the resurrection of the body.' But upon the occasion your lordship has given me in your last letter, to look a little more narrowly into what revelation has declared concerning the resurrection, and finding no such express words in the scripture, as that 'the body shall rise or be raised, or the resurrection of the body;' I shall in the next edition of it change these words of my book, ‡ 'The dead bodies of men shall rise,' into these of the scripture, 'the dead shall rise.' Not that I question that the dead shall be raised with bodies; but in matters of revelation, I think it not only safest, but our duty, as far as any one delivers it for revelation, to keep close to the words of the scripture, unless he will assume to himself the authority of one inspired, or make himself wiser than the Holy Spirit himself. If I had spoke of the resurrection in precisely scripture terms, I had avoided giving your lordship the occasion of making || here such a verbal reflection on my words; 'What! not if there be an idea of identity as to the body?'

* 2d Ans.

† Ibid.

‡ Essay, B. 4. C. 18. § 7.

|| 2d Ans.

CHAP. XXVIII.

Of other Relations.

§ 1. BESIDES the before-mentioned oc- Proportions of time, place, and causality, of tional. comparing, or referring things one to another, there

are, as I have said, infinite others, some whereof I shall mention.

First, The first I shall name is some one simple idea ; which being capable of parts or degrees, affords an occasion of comparing the subjects wherein it is to one another, in respect to that simple idea, v. g. whiter, sweeter, equal, more, &c. These relations depending on the equality and excess of the same simple idea, in several subjects, may be called, if one will, proportional ; and that these are only conversant about those simple ideas received from sensation or reflection, is so evident, that nothing need be said to evince it.

Natural. § 2. Secondly, Another occasion of comparing things together, or considering one thing, so as to include in that consideration some other thing, is the circumstances of their origin or beginning ; which being not afterwards to be altered, make the relations depending thereon as lasting as the subjects to which they belong ; v. g. father and son, brothers, cousin-germans, &c. which have their relations by one community of blood, wherein they partake in several degrees : countrymen, i. e. those who were born in the same country, or tract of ground ; and these I call natural relations : wherein we may observe, that mankind have fitted their notions and words to the use of common life ; and not to the truth and extent of things. For it is certain, that in reality the relation is the same betwixt the begetter and the begotten, in the several races of other animals as well as men : but yet it is seldom said, this bull is the grandfather of such a calf ; or that two pigeons are cousin-germans. It is very convenient, that by distinct names these relations should be observed, and marked out in mankind ; there being occasion, both in laws, and other communications one with another, to mention and take notice of men under these relations : from whence also arise the obligations of several duties amongst men. Whereas in brutes, men having very little or no cause to mind these relations, they have not thought fit to give them distinct and peculiar names. This, by the way, may give us some light into the different state and growth

of languages ; which, being suited only to the convenience of communication, are proportioned to the notions men have, and the commerce of thoughts familiar amongst them ; and not to the reality or extent of things, nor to the various respects might be found among them, nor the different abstract considerations might be framed about them. Where they had no philosophical notions, there they had no terms to express them : and it is no wonder men should have framed no names for those things they found no occasion to discourse of. From whence it is easy to imagine, why, as in some countries, they may have not so much as the name for a horse ; and in others, where they are more careful of the pedigrees of their horses, than of their own, that there they may have not only names for particular horses, but also of their several relations of kindred one to another.

§ 3. Thirdly, Sometimes the foundation of considering things, with reference to one another, is some act whereby any one comes by a moral right, power, or obligation to do something. Thus a general is one that hath power to command an army ; and an army under a general is a collection of armed men obliged to obey one man. A citizen or a burgher, is one who has a right to certain privileges in this or that place. All this sort depending upon men's wills, or agreement in society, I call instituted, or voluntary : and may be distinguished from the natural, in that they are most, if not all of them, some way or other alterable, and separable from the persons to whom they have sometimes belonged, though neither of the substances, so related, be destroyed. Now though these are all reciprocal, as well as the rest, and contain in them a reference of two things one to the other ; yet, because one of the two things often wants a relative name, importing that reference, men usually take no notice of it, and the relation is commonly overlooked : v. g. a patron and client are easily allowed to be relations, but a constable or dictator are not so readily, at first hearing, considered as such ; because there is no peculiar name for those who are under the

command of a dictator, or constable, expressing a relation to either of them : though it be certain, that either of them hath a certain power over some others ; and so is so far related to them, as well as a patron is to his client, or general to his army.

Moral. § 4. Fourthly, There is another sort of relation, which is the conformity, or disagreement, men's voluntary actions have to a rule to which they are referred, and by which they are judged of; which, I think, may be called moral relation, as being that which denominates our moral actions, and deserves well to be examined; there being no part of knowledge wherein we should be more careful to get determined ideas, and avoid, as much as may be, obscurity and confusion. Human actions, when with their various ends, objects, manners, and circumstances, they are framed into distinct complex ideas, are, as has been shown, so many mixed modes, a great part whereof have names annexed to them. Thus, supposing gratitude to be a readiness to acknowledge and return kindness received, polygamy to be the having more wives than one at once; when we frame these notions thus in our minds, we have there so many determined ideas of mixed modes. But this is not all that concerns our actions; it is not enough to have determined ideas of them, and to know what names belong to such and such combinations of ideas. We have a farther and greater concernment, and that is, to know whether such actions so made up are morally good or bad.

Moral good and evil. § 5. Good and evil, as hath been shown, b. ii. chap. 20. § 2. and chap. 21. § 42.

are nothing but pleasure or pain, or that which occasions or procures pleasure or pain to us. Moral good and evil then is only the conformity or disagreement of our voluntary actions to some law, whereby good or evil is drawn on us by the will and power of the law-maker ; which good and evil, pleasure or pain, attending our observance, or breach of the law, by the decree of the law-maker, is that we call reward and punishment.

§ 6. Of these moral rules, or laws, to which men generally refer, and by which they judge of the rectitude or pravity of their actions, there seem to me to be three sorts, with their three different enforcements, or rewards and punishments. For since it would be utterly in vain to suppose a rule set to the free actions of men, without annexing to it some enforcement of good and evil to determine his will, we must, wherever we suppose a law, suppose also some reward or punishment annexed to that law. It would be in vain for one intelligent being to set a rule to the actions of another, if he had it not in his power to reward the compliance with, and punish deviation from his rule, by some good and evil, that is not the natural product and consequence of the action itself. For that being a natural convenience or inconvenience, would operate of itself without a law. This, if I mistake not, is the true nature of all law, properly so called.

§ 7. The laws that men generally refer their actions to, to judge of their rectitude or obliquity, seem to me to be these three. Laws. 1. The divine law. 2. The civil law. 3. The law of opinion or reputation, if I may so call it. By the relation they bear to the first of these, men judge whether their actions are sins or duties; by the second, whether they be criminal or innocent; and by the third, whether they be virtues or vices.

§ 8. First, the divine law, whereby I mean that law which God has set to the actions of men, whether promulgated to them by the light of nature, or the voice of revelation. Divine law, the measure of sin and duty. That God has given a rule whereby men should govern themselves, I think there is nobody so brutish as to deny. He has a right to do it, we are his creatures: he has goodness and wisdom to direct our actions to that which is best; and he has power to enforce it by rewards and punishments, of infinite weight and duration in another life: for nobody can take us out of his hands. This is the only true touchstone of moral rectitude; and by comparing them to

this law it is, that men judge of the most considerable moral good or evil of their actions: that is, whether as duties or sins, they are like to procure them happiness or misery from the hands of the Almighty.

Civil law, the measure of crimes and innocence. § 9. Secondly, the civil law, the rule set by the commonwealth to the actions of those who belong to it, is another rule to which men refer their actions, to judge whether they be criminal or no. This law nobody overlooks, the rewards and punishments that enforce it being ready at hand, and suitable to the power that makes it; which is the force of the commonwealth, engaged to protect the lives, liberties, and possessions of those who live according to its law; and has power to take away life, liberty, or goods from him who disobeys: which is the punishment of offences committed against this law.

Philosophical law the measure of virtue and vice. § 10. Thirdly, the law of opinion or reputation. Virtue and vice are names pretended and supposed every-where to stand for actions in their own nature right and wrong; and as far as they really are so applied, they so far are co-incident with the divine law above-mentioned. But yet whatever is pretended, this is visible, that these names virtue and vice, in the particular instances of their application, through the several nations and societies of men in the world, are constantly attributed only to such actions as in each country and society are in reputation or discredit. Nor is it to be thought strange, that men every-where should give the name of virtue to those actions, which amongst them are judged praise-worthy; and call that vice, which they account blameable; since otherwise they would condemn themselves, if they should think any thing right, to which they allowed not commendation: any thing wrong, which they let pass without blame. Thus the measure of what is every-where called and esteemed virtue and vice, is the approbation or dislike, praise or blame, which by a secret and tacit consent establishes itself in the several societies, tribes, and clubs of men in the world; whereby several actions come to find

credit or disgrace amongst them, according to the judgment, maxims, or fashion of that place. For though men uniting into politic societies have resigned up to the public the disposing of all their force, so that they cannot employ it against any fellow-citizens, any farther than the law of the country directs; yet they retain still the power of thinking well or ill, approving or disapproving of the actions of those whom they live amongst, and converse with: and by this approbation and dislike they establish amongst themselves what they will call virtue and vice.

§ 11. That this is the common measure of virtue and vice, will appear to any one who considers, that though that passes for vice in one country, which is counted a virtue, or at least not vice in another; yet, every-where, virtue and praise, vice and blame go together. Virtue is every-where that which is thought praise-worthy; and nothing else but that which has the allowance of public esteem is called virtue.^a Vir-

^a Our author, in his preface to the fourth edition, taking notice how apt men have been to mistake him, added what here follows: *Of this the ingenious author of the discourse concerning the nature of man has given me a late instance, to mention no other. For the civility of his expressions, and the candour that belongs to his order, forbid me to think, that he would have closed his preface with an insinuation, as if in what I had said, book ii. chap. 28, concerning the third rule which men refer their actions to, I went about to make virtue vice, and vice virtue, unless he had mistaken my meaning: which he could not have done, if he had but given himself the trouble to consider what the argument was I was then upon, and what was the chief design of that chapter, plainly enough set down in the fourth section, and those following. For I was there not laying down moral rules, but showing the original and nature of moral ideas, and enumerating the rules men make use of in moral relations, whether those rules were true or false: and, pursuant thereunto, I tell what has every-where that denomination, which in the language of that place answers to virtue, and vice in ours; which alters not the nature of things, though men do generally judge of, and denominate their actions according to the esteem and fashion of the place, or sect they are of.*

If he had been at the pains to reflect on what I had said, b. i. c. 3. § 18. and in this present chapter, § 13, 14, 15, and 20, he would have known what I think of the eternal and unalterable nature of right and wrong, and what I call virtue and vice: and if he had observed, that, in the place he quotes, I only report as matter of fact what others call

tue and praise are so united, that they are called often by the same name. "Sunt sua præmia laudi," says Virgil ; and so Cicero, "nihil habet natura præstantius, quam honestatem, quam laudem, quam dignitatem, quam decus;" which, he tells you, are all names for the same thing, Tusc. lib. ii. This is the language of the heathen philosophers, who well understood wherein their notions of virtue and vice consisted, and though perhaps by the different temper, education, fashion, max-

virtue and vice, he would not have found it liable to any great exception. For, I think, I am not much out in saying, that one of the rules made use of in the world for a ground or measure of a moral relation, is that esteem and reputation which several sorts of actions find variously in the several societies of men, according to which they are there called virtues and vices; and whatever authority the learned Mr. Lowde places in his old English dictionary, I dare say it no-where tells him (if I should appeal to it) that the same action is not in credit, called and counted a virtue in one place, which being in disrepute, passes for and under the name of vice in another. The taking notice that men bestow the names of virtue and vice according to this rule of reputation, is all I have done, or can be laid to my charge to have done, towards the making vice virtue, and virtue vice. But the good man does well, and as becomes his calling, to be watchful in such points, and to take the alarm, even at expressions, which standing alone by themselves might sound ill, and be suspected.

It is to this zeal, allowable in his function, that I forgive his citing, as he does, these words of mine, in § 11. of this chapter: 'The exhortations of inspired teachers have not feared to appeal to common repute: "Whatsoever things are lovely, whatsoever things are of good report, if there be any virtue, if there be any praise," &c. Phil. iv. 8.' without taking notice of those immediately preceding, which introduce them, and run thus: 'whereby in the corruption of manners, the true boundaries of the law of nature, which ought to be the rule of virtue and vice, were pretty well preserved; so that even the exhortations of inspired teachers, &c.' by which words, and the rest of that section, it is plain that I brought this passage of St. Paul, not to prove that the general measure of what men call virtue and vice, throughout the world, was the reputation and fashion of each particular society within itself; but to show, that though it were so, yet, for reasons I there give, men, in that way of denominating their actions, did not for the most part much vary from the law of nature: which is that standing and unalterable rule, by which they ought to judge of the moral rectitude and pravity of their actions, and accordingly denominate them virtues or vices. Had Mr. Lowde considered this, he would have found it little to his purpose to have quoted that passage in a sense I used it not; and would, I imagine, have spared the explication he subjoins to it, as not very necessary. But I hope this second edition will

ims, or interests of different sorts of men, it fell out that what was thought praise-worthy in one place, escaped not censure in another; and so in different societies, virtues and vices were changed; yet, as to the main, they for the most part kept the same every-where. For since nothing can be more natural, than to encourage with esteem and reputation that wherein every one

give him satisfaction in the point, and that this matter is now so expressed, as to show him there was no cause of scruple.

Though I am forced to differ from him in those apprehensions he has expressed in the latter end of his preface, concerning what I had said about virtue and vice; yet we are better agreed than he thinks, in what he says in his third chapter, p. 78, concerning natural inscription and innate notions. I shall not deny him the privilege he claims, p. 52, to state the question as he pleases, especially when he states it so, as to leave nothing in it contrary to what I have said: for, according to him, innate notions being conditional things, depending upon the concurrence of several other circumstances, in order to the soul's exerting them; all that he says for innate, imprinted, impressed notions (for of innate ideas he says nothing at all) amounts at last only to this; that there are certain propositions, which though the soul from the beginning, or when a man is born, does not know, yet by assistance from the outward senses, and the help of some previous cultivation. it may afterwards come certainly to know the truth of; which is no more than what I have affirmed in my first book. For I suppose by the soul's exerting them, he means its beginning to know them, or else the soul's exerting of notions will be to me a very unintelligible expression; and I think at best is a very unfit one in this case, it misleading men's thoughts by an insinuation, as if these notions were in the mind before the soul exerts them, i. e. before they are known: whereas truly before they are known, there is nothing of them in the mind, but a capacity to know them, when the concurrence of those circumstances, which this ingenious author thinks necessary in order to the soul's exerting them, brings them into our knowledge.

P. 52. I find him express it thus; 'these natural notions are not so imprinted upon the soul, as that they naturally and necessarily exert themselves (even in children and idiots) without any assistance from the outward senses, or without the help of some previous cultivation.' Here he says they exert themselves, as p. 78, that the soul exerts them. When he has explained to himself or others what he means by the soul's exerting innate notions, or their exerting themselves, and what that previous cultivation and circumstances, in order to their being exerted, are; he will, I suppose, find there is so little of controversy between him and me in the point, hating that he calls that exerting of notions, which I in a more vulgar style call knowing, that I have reason to think he brought in my name upon this occasion only out of the pleasure he has to speak civilly of me; which I must gratefully acknowledge he has done wherever he mentions me, not without conferring on me, as some others have done, a title I have no right to.

finds his advantage, and to blame and discountenance the contrary; it is no wonder that esteem and discredit, virtue and vice, should in a great measure every-where correspond with the unchangeable rule of right and wrong, which the law of God hath established: there being nothing that so directly and visibly secures and advances the general good of mankind in this world, as obedience to the laws he has set them, and nothing that breeds such mischiefs and confusion, as the neglect of them. And therefore men, without renouncing all sense and reason, and their own interest, which they are so constantly true to, could not generally mistake in placing their commendation and blame on that side that really deserved it not. Nay, even those men whose practice was otherwise, failed not to give their approbation right; few being depraved to that degree, as not to condemn, at least in others, the faults they themselves were guilty of: whereby, even in the corruption of manners, the true boundaries of the law of nature, which ought to be the rule of virtue and vice, were pretty well preferred. So that even the exhortations of inspired teachers have not feared to appeal to common repute: "Whatsoever is lovely, whatsoever is of good report, if there be any virtue, if there be any praise," &c. Phil. iv. 8.

Its enforce-
ments com-
mendation
and discre-
dit.

§ 12. If any one shall imagine that I have forgot my own notion of a law, when I make the law, whereby men judge of virtue and vice, to be nothing else but the consent of private men, who have not authority enough to make a law: especially wanting that, which is so necessary and essential to a law, a power to enforce it: I think I may say, that he who imagines commendation and disgrace not to be strong motives to men, to accommodate themselves to the opinions and rules of those with whom they converse, seems little skilled in the nature or history of mankind: the greatest part whereof he shall find to govern themselves chiefly, if not solely, by this law of fashion; and so they do that which keeps them in reputation with their company, little regard the laws of God, or the magistrate. The

penalties that attend the breach of God's laws, some, nay, perhaps most men, seldom seriously reflect on; and amongst those that do, many, whilst they break the law, entertain thoughts of future reconciliation, and making their peace for such breaches. And as to the punishments due from the laws of the commonwealth, they frequently flatter themselves with the hopes of impunity. But no man escapes the punishment of their censure and dislike, who offends against the fashion and opinion of the company he keeps, and would recommend himself to. Nor is there one of ten thousand, who is stiff and insensible enough to bear up under the constant dislike and condemnation of his own club. He must be of a strange and unusual constitution, who can content himself to live in constant disgrace and disrepute with his own particular society. Solitude many men have sought, and been reconciled to: but nobody, that has the least thought or sense of a man about him, can live in society under the constant dislike and ill opinion of his familiars, and those he converses with. This is a burden too heavy for human sufferance: and he must be made up of irreconcilable contradictions, who can take pleasure in company, and yet be insensible of contempt and disgrace from his companions.

§ 13. These three then, first, the law of God; secondly, the law of politic societies; thirdly, the law of fashion, or private censure; are those to which men variously compare their actions; and it is by their conformity to one of these laws that they take their measures, when they would judge of their moral rectitude, and denominate their actions good or bad.

These three laws the rules of moral good and evil.

§ 14. Whether the rule, to which, as to a touchstone, we bring our voluntary actions, to examine them by, and try their goodness, and accordingly to name them: which is, as it were, the mark of the value we set upon them: whether, I say, we take that rule from the fashion of the country, or the will of a law-maker, the mind is easily able to observe the relation

Morality is the relation of actions to these rules.

any action hath to it, and to judge whether the action agrees or disagrees with the rule; and so hath a notion of moral goodness or evil, which is either conformity or not conformity of any action to that rule: and therefore is often called moral rectitude. This rule being nothing but a collection of several simple ideas, the conformity thereto is but so ordering the action, that the simple ideas belonging to it may correspond to those which the law requires. And thus we see how moral beings and notions are founded on, and terminated in these simple ideas we have received from sensation or reflection. For example, let us consider the complex idea we signify by the word murder; and when we have taken it asunder, and examined all the particulars, we shall find them to amount to a collection of simple ideas derived from reflection or sensation, viz. first, from reflection on the operations of our own minds, we have the ideas of willing, considering, purposing before-hand, malice, or wishing ill to another; and also of life, or perception, and self-motion. Secondly, from sensation we have the collection of those simple sensible ideas which are to be found in a man, and of some action, whereby we put an end to perception and motion in the man; all which simple ideas are comprehended in the word murder. This collection of simple ideas being found by me to agree or disagree with the esteem of the country I have been bred in, and to be held by most men there worthy praise or blame, I call the action virtuous or vicious: if I have the will of a supreme invisible law-giver for my rule; then, as I supposed the action commanded or forbidden by God, I call it good or evil, sin or duty: and if I compare it to the civil law, the rule made by the legislative power of the country, I call it lawful or unlawful, a crime or no crime. So that whencesoever we take the rule of moral actions, or by what standard soever we frame in our minds the ideas of virtues or vices, they consist only and are made up of collections of simple ideas, which we originally received from sense or reflection, and their rectitude or obliquity consists

in the agreement or disagreement with those patterns prescribed by some law.

§ 15. To conceive rightly of moral actions, we must take notice of them under this two-fold consideration. First, as they are in themselves each made up of such a collection of simple ideas. Thus drunkenness, or lying, signify such or such a collection of simple ideas, which I call mixed modes, and in this sense they are as much positive absolute ideas, as the drinking of a horse, or speaking of a parrot. Secondly, our actions are considered as good, bad, or indifferent; and in this respect they are relative, it being their conformity to, or disagreement with some rule that makes them to be regular or irregular, good or bad: and so, as far as they are compared with a rule, and thereupon denominated, they come under relation. Thus the challenging and fighting with a man, as it is a certain positive mode, or particular sort of action, by particular ideas, distinguished from all others, is called duelling: which, when considered in relation to the law of God, will deserve the name sin; to the law of fashion, in some countries, valour and virtue: and to the municipal laws of some governments, a capital crime. In this case, when the positive mode has one name, and another name as it stands in relation to the law, the distinction may as easily be observed, as it is in substances, where one name, v. g. man, is used to signify the thing; another, v. g. father, to signify the relation.

§ 16. But because very frequently the positive idea of the action, and its moral relation, are comprehended together under one name, and the same word made use of to express both the mode or action, and its moral rectitude or obliquity; therefore the relation itself is less taken notice of, and there is often no distinction made between the positive idea of the action, and the reference it has to a rule. By which confusion of these two distinct considerations under one term, those who yield too easily to the impressions of sounds, and are forward to take names for things, are often misled in their judgment of actions. Thus the taking from an-

The deno-
minations of
actions often
mislead us.

other what is his, without his knowledge or allowance, is properly called stealing; but that name being commonly understood to signify also the moral pravity of the action, and to denote its contrariety to the law, men are apt to condemn whatever they hear called stealing as an ill action, disagreeing with the rule of right. And yet the private taking away his sword from a madman, to prevent his doing mischief, though it be properly denominated stealing, as the name of such a mixed mode; yet when compared to the law of God, and considered in its relation to that supreme rule, it is no sin or transgression, though the name stealing ordinarily carries such an intimation with it.

Relations in- § 17. And thus much for the relation of
numerable. human actions to a law, which therefore I
call moral relation.

It would make a volume to go over all sorts of relations; it is not therefore to be expected that I should here mention them all. It suffices to our present purpose to show by these, what the ideas are we have of this comprehensive consideration, called relation: which is so various, and the occasions of it so many (as many as there can be of comparing things one to another) that it is not very easy to reduce it to rules, or under just heads. Those I have mentioned, I think, are some of the most considerable, and such as may serve to let us see from whence we get our ideas of relations, and wherein they are founded. But before I quit this argument, from what has been said, give me leave to observe:

All relations § 18. First, That it is evident, that all re-
terminate in relation terminates in, and is ultimately found-
simple ideas. ed on those simple ideas we have got from
sensation or reflection; so that all that we have in our thoughts ourselves (if we think of any thing, or have any meaning) or would signify to others, when we use words standing for relations, is nothing but some simple ideas, or collections of simple ideas, compared one with another. This is so manifest in that sort called proportion-
al, that nothing can be more: for when a man says, honey is sweeter than wax, it is plain that his thoughts

in this relation terminate in this simple idea, sweetness, which is equally true of all the rest; though where they are compounded or decompounded, the simple ideas they are made up of are, perhaps, seldom taken notice of. V. g. when the word father is mentioned; first, there is meant that particular species, or collective idea, signified by the word man. Secondly, those sensible simple ideas, signified by the word generation: and, thirdly, the effects of it, and all the simple ideas signified by the word child. So the word friend being taken for a man, who loves, and is ready to do good to another, has all these following ideas to the making of it up: first, all the simple ideas, comprehended in the word man, or intelligent being. Secondly, the idea of love. Thirdly, the idea of readiness or disposition. Fourthly, the idea of action, which is any kind of thought or motion. Fifthly, the idea of good, which signifies any thing that may advance his happiness, and terminates at last, if examined, in particular simple ideas; of which the word good in general signifies any one, but, if removed from all simple ideas quite, it signifies nothing at all. And thus also all moral words terminate at last, though perhaps more remotely, in a collection of simple ideas; the immediate signification of relative words, being very often other supposed known relations; which, if traced one to another, still end in simple ideas.

§ 19. Secondly, That in relations we have We have or-
 for the most part, if not always, as clear a dinarily as
 notion of the relation, as we have of those clear (or
 simple ideas, wherein it is founded. clearer) a
 Agreement or disagreement, whercon relation de- the relation
 pends, being things whereof we have com- as of its
 monly as clear ideas, as of any other whatso- foundation.
 ever; it being but the distinguishing simple ideas, or
 their degrees one from another, without which we
 could have no distinct knowledge at all. For if I have
 a clear idea of sweetness, light or extension, I have too,
 of equal, or more or less of each of these: if I know
 what it is for one man to be born of a woman, viz.
 Sempronia, I know what it is for another man to be

born of the same woman Sempronia; and so have as clear a notion of brothers, as of births, and perhaps clearer. For if I believed that Sempronia dug Titus out of the parsley-bed (as they used to tell children) and thereby became his mother; and that afterwards, in the same manner, she dug Caius out of the parsley-bed; I had as clear a notion of the relation of brothers between them, as if I had all the skill of a midwife: the notion that the same woman contributed, as mother, equally to their births (though I were ignorant or mistaken in the manner of it), being that on which I grounded the relation, and that they agreed in that circumstance of birth, let it be what it will. The comparing them then in their descent from the same person, without knowing the particular circumstances of that descent, is enough to found my notion of their having or not having the relation of brothers. But though the ideas of particular relations are capable of being as clear and distinct in the minds of those, who will duly consider them, as those of mixed modes, and more determinate than those of substances; yet the names belonging to relation are often of as doubtful and uncertain signification, as those of substances or mixed modes, and much more than those of simple ideas: because relative words being the marks of this comparison, which is made only by men's thoughts, and is an idea only in men's minds, men frequently apply them to different comparisons of things, according to their own imaginations, which do not always correspond with those of others using the same name.

§ 20. Thirdly, That in these I call moral relations, I have a true notion of relation by comparing the action with the rule, whether the rule be true or false. For if I measure any thing by a yard, I know whether the thing I measure be longer or shorter than that supposed yard, though perhaps the yard I measure by be not exactly the standard; which indeed is another inquiry. For though the rule be erroneous, and I mistaken in it; yet the agreement or disagreement observable in that which I compare

The notion of the relation is the same, whether the rule any action is compared to be true or false.

with, makes me perceive the relation. Though measuring by a wrong rule, I shall thereby be brought to judge amiss of its moral rectitude, because I have tried it by that which is not the true rule: yet I am not mistaken in the relation which that action bears to that rule I compare it to, which is agreement or disagreement.

CHAP. XXIX.

Of Clear and Obscure, Distinct and Confused Ideas.

§ 1. HAVING shown the original of our ideas, and taken a view of their several sorts; considered the difference between the simple and the complex, and observed how the complex ones are divided into those of modes, substances, and relations; all which, I think, is necessary to be done by any one, who would acquaint himself thoroughly with the progress of the mind in its apprehension and knowledge of things: it will, perhaps, be thought I have dwelt long enough upon the examination of ideas. I must, nevertheless, crave leave to offer some few other considerations concerning them. The first is, that some are clear, and others obscure; some distinct, and others confused.

§ 2. The perception of the mind being most aptly explained by words relating to the sight, we shall best understand what is meant by clear and obscure in our ideas, by reflecting on what we call clear and obscure in the objects of sight. Light being that which discovers to us visible objects, we give the name of obscure to that which is not placed in a light sufficient to discover minutely to us the figure and colours, which are observable in it, and which, in a better light, would be discernible. In like manner our simple ideas are clear, when they are such as the objects themselves, from

whence they were taken, did or might, in a well-ordered sensation or perception, present them. Whilst the memory retains them thus, and can produce them to the mind, whenever it has occasion to consider them, they are clear ideas. So far as they either want any thing of the original exactness, or have lost any of their first freshness, and are, as it were, faded or tarnished by time; so far are they obscure. Complex ideas, as they are made up of simple ones, so they are clear when the ideas that go to their composition are clear: and the number and order of those simple ideas, that are the ingredients of any complex one, is determinate and certain.

Causes of
obscurity. § 3. The causes of obscurity in simple ideas seem to be either dull organs, or very slight and transient impressions made by the objects, or else a weakness in the memory not able to retain them as received. For, to return again to visible objects to help us to apprehend this matter: if the organs or faculties of perception, like wax over-hardened with cold, will not receive the impression of the seal, from the usual impulse wont to imprint it; or, like wax of a temper too soft, will not hold it well when well imprinted; or else supposing the wax of a temper fit, but the seal not applied with a sufficient force to make a clear impression: in any of these cases the print left by the seal will be obscure. This, I suppose, needs no application to make it plainer.

Distinct and
confused,
what. § 4. As a clear idea is that whereof the mind has such a full and evident perception, as it does receive from an outward object operating duly on a well-disposed organ; so a distinct idea is that wherein the mind perceives a difference from all other; and a confused idea is such a one, as is not sufficiently distinguishable from another, from which it ought to be different.

Objection. § 5. If no idea be confused, but such as is not sufficiently distinguishable from another, from which it should be different; it will be hard, may any one say, to find any where a confused idea. For let

any idea be as it will, it can be no other but such as the mind perceives it to be; and that very perception sufficiently distinguishes it from all other ideas, which cannot be other, i. e. different, without being perceived to be so. No idea therefore can be undistinguishable from another, from which it ought to be different, unless you would have it different from itself: for from all other it is evidently different.

§ 6. To remove this difficulty, and to help us to conceive aright what it is that makes the confusion ideas are at any time chargeable with, we must consider, that things ranked under distinct names are supposed different enough to be distinguished, and so each sort by its peculiar name may be marked, and discoursed of a-part upon any occasion: and there is nothing more evident, than that the greatest part of different names are supposed to stand for different things. Now every idea a man has being visibly what it is, and distinct from all other ideas but itself; that which makes it confused, is, when it is such, that it may as well be called by another name, as that which it is expressed by: the difference which keeps the things (to be ranked under those two different names) distinct, and makes some of them belong rather to the one, and some of them to the other of those names, being left out; and so the distinction, which was intended to be kept up by those different names, is quite lost.

§ 7. The defaults which usually occasion this confusion, I think, are chiefly these following: Defaults which make confusion.

First, when any complex idea (for it is complex ideas that are most liable to confusion) is made up of too small a number of simple ideas, and such only as are common to other things, whereby the differences that make it deserve a different name, are left out. Thus he that has an idea made up of barely the simple ones of a beast with spots, has but a confused idea of a leopard; it not being thereby sufficiently distinguished from a lynx, and several other sorts of beasts that are

First, complex ideas made up of too few simple ones.

spotted. So that such an idea, though it hath the peculiar name leopard, is not distinguishable from those designed by the names lynx or panther, and may as well come under the name lynx as leopard. How much the custom of defining of words by general terms contributes to make the ideas we would express by them confused and undetermined, I leave others to consider. This is evident, that confused ideas are such as render the use of words uncertain, and take away the benefit of distinct names. When the ideas, for which we use different terms, have not a difference answerable to their distinct names, and so cannot be distinguished by them, there it is that they are truly confused.

Secondly, or § 8. Secondly, Another fault which its simple ones jumbled disorderly together. makes our ideas confused, is, when though the particulars that make up any idea are in number enough: yet they are so jumbled together, that it is not easily discernible, whether it more belongs to the name that is given it, than to any other. There is nothing properer to make us conceive this confusion, than a sort of pictures usually shown as surprising pieces of art, wherein the colours, as they are laid by the pencil on the table itself, mark out very odd and unusual figures, and have no discernible order in their position. This draught, thus made up of parts wherein no symmetry nor order appears, is in itself no more a confused thing, than the picture of a cloudy sky; wherein though there be as little order of colours or figures to be found, yet nobody thinks it a confused picture. What is it then that makes it be thought confused, since the want of symmetry does not? as it is plain it does not; for another draught made, barely in imitation of this, could not be called confused. I answer, that which makes it be thought confused, is, the applying it to some name, to which it does no more discernibly belong, than to some other: v. g. When it is said to be the picture of a man, or Cæsar, than any one with reason counts it confused: because it is not discernible, in that state, to belong more to the name man, or Cæsar, than to the name baboon, or Pompey; which are supposed to stand for

different ideas from those signified by man, or Cæsar. But when a cylindrical mirrour, placed right, hath reduced those irregular lines on the table into their due order and proportion, then the confusion ceases, and the eye presently sees that it is a man, or Cæsar, i. e. that it belongs to those names; and that it is sufficiently distinguishable from a baboon, or Pompey, i. e. from the ideas signified by those names. Just thus it is with our ideas, which are as it were the pictures of things. No one of these mental draughts, however the parts are put together, can be called confused (for they are plainly discernible as they are) till it be ranked under some ordinary name, to which it cannot be discerned to belong, any more than it does to some other name of an allowed different signification.

§ 9. Thirdly, A third defect that frequently gives the name of confused to our ideas, is, when any one of them is uncertain and undetermined. Thus we may observe men, who not forbearing to use the ordinary words of their language, till they have learned their precise signification, change the idea they make this or that term stand for, almost as often as they use it. He that does this, out of uncertainty of what he should leave out, or put into his idea of church or idolatry, every time he thinks of either, and holds not steady to any one precise combination of ideas that makes it up, is said to have a confused idea of idolatry or the church: though this be still for the same reason as the former, viz. because a mutable idea (if we will allow it to be one idea) cannot belong to one name rather than another; and so loses the distinction that distinct names are designed for.

§ 10. By what has been said, we may observe how much names, as supposed steady signs of things, and by their difference to stand for and keep things distinct that in themselves are different, are the occasion of denominating ideas distinct or confused, by a secret and unobserved reference the mind makes of its ideas to such names. This perhaps

Thirdly, or
are mutable
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termined.

Confusion
without re-
ference to
names, hard-
ly conceiva-
ble.

will be fuller understood, after what I say of words, in the third book, has been read and considered. But without taking notice of such a reference of ideas to distinct names, as the signs of distinct things, it will be hard to say what a confused idea is. And therefore when a man designs, by any name, a sort of things, or any one particular thing, distinct from all others, the complex idea he annexes to that name is the more distinct, the more particular the ideas are, and the greater and more determinate the number and order of them is, whereof it is made up. For the more it has of these, the more it has still of the perceivable differences, whereby it is kept separate and distinct from all ideas belonging to other names, even those that approach nearest to it; and thereby all confusion with them is avoided.

Confusion concerns al- ways two ideas. § 11. Confusion, making it a difficulty to separate two things that should be separated, concerns always two ideas; and those most, which most approach one another. Whenever therefore we suspect any idea to be confused, we must examine what other it is in danger to be confounded with, or which it cannot easily be separated from; and that will always be found an idea belonging to another name, and so should be a different thing, from which yet it is not sufficiently distinct; being either the same with it, or making a part of it, or at least as properly called by that name, as the other it is ranked under; and so keeps not that difference from that other idea, which the different names import.

Causes of confusion. § 12. This, I think, is the confusion proper to ideas, which still carries with it a secret reference to names. At least, if there be any other confusion of ideas, this is that which most of all disorders men's thoughts and discourses: ideas, as ranked under names, being those that for the most part men reason of within themselves, and always those which they commune about with others. And therefore where there are supposed two different ideas marked by two different names, which are not as distinguishable as the sounds that stand for them, there never fails

to be confusion : and where any ideas are distinct as the ideas of those two sounds they are marked by, there can be between them no confusion. The way to prevent it is to collect and unite into one complex idea, as precisely as is possible, all those ingredients whereby it is differenced from others ; and to them so united in a determinate number and order, apply steadily the same name. But this neither accommodating men's ease or vanity, or serving any design but that of naked truth, which is not always the thing aimed at, such exactness is rather to be wished than hoped for. And since the loose application of names to undetermined, variable, and almost no ideas, serves both to cover our own ignorance, as well as to perplex and confound others, which goes for learning and superiority in knowledge, it is no wonder that most men should use it themselves, whilst they complain of it in others. Though, I think, no small part of the confusion to be found in the notions of men might by care and ingenuity be avoided, yet I am far from concluding it every-where wilful. Some ideas are so complex, and made up of so many parts, that the memory does not easily retain the very same precise combination of simple ideas under one name ; much less are we able constantly to divine for what precise complex idea such a name stands in another man's use of it. From the first of these, follows confusion in a man's own reasonings and opinions within himself ; from the latter, frequent confusion in discoursing and arguing with others. But having more at large treated of words, their defects and abuses, in the following book, I shall here say no more of it.

§ 13. Our complex ideas being made up of collections, and so variety of simple ones, may accordingly be very clear and distinct in one part, and very obscure and confused in another. In a man who speaks of a chiliaedron, or a body of a thousand sides, the ideas of the figure may be very confused, though that of the number be very distinct ; so that he being able to discourse and demonstrate concerning that part

Complex ideas may be distinct in one part, and confused in another.

of his complex idea, which depends upon the number of a thousand, he is apt to think he has a distinct idea of a chiliaedron ; though it be plain he has no precise idea of its figure, so as to distinguish it by that, from one that has but 999 sides ; the not observing whereof causes no small error in men's thoughts, and confusion in their discourses.

This, if not heeded, causes confusion in our arguings. § 14. He that thinks he has a distinct idea of the figure of a chiliaedron, let him for trial-sake take another parcel of the same uniform matter, viz. gold, or wax, of an equal bulk, and make it into a figure of 999 sides ; he will, I doubt not, be able to distinguish these two ideas one from another, by the number of sides ; and reason and argue distinctly about them, whilst he keeps his thoughts and reasoning to that part only of these ideas, which is contained in their numbers ; as that the sides of the one could be divided into two equal numbers, and of the others not, &c. But when he goes about to distinguish them by their figure, he will there be presently at a loss, and not be able, I think, to frame in his mind two ideas, one of them distinct from the other, by the bare figure of these two pieces of gold ; as he could, if the same parcels of gold were made one into a cube, the other a figure of five sides. In which incomplete ideas, we are very apt to impose on ourselves, and wrangle with others, especially where they have particular and familiar names. For being satisfied in that part of the idea, which we have clear ; and the name which is familiar to us, being applied to the whole, containing that part also which is imperfect and obscure : we are apt to use it for that confused part, and draw deductions from it, in the obscure part of its signification, as confidently as we do from the other.

Instance in eternity. § 15. Having frequently in our mouths the name eternity, we are apt to think we have a positive comprehensive idea of it, which is as much as to say, that there is no part of that duration which is not clearly contained in our idea. It is true that he that thinks so may have a clear idea of

duration; he may also have a very clear idea of a very great length of duration; he may also have a clear idea of the comparison of that great one with still a greater: but it not being possible for him to include in his idea of any duration, let it be as great as it will, the whole extent together of a duration, where he supposes no end, that part of his idea, which is still beyond the bounds of that large duration, he represents to his own thoughts, is very obscure and undetermined. And hence it is that in disputes and reasonings concerning eternity, or any other infinite, we are apt to blunder, and involve ourselves in manifest absurdities.

§ 16. In matter we have no clear ideas of the smallness of parts much beyond the Divisibility of matter. smallest that occur to any of our senses: and therefore when we talk of the divisibility of matter in infinitum, though we have clear ideas of division and divisibility, and have also clear ideas of parts made out of a whole by division; yet we have but very obscure and confused ideas of corpuscles, or minute bodies so to be divided, when by former divisions they are reduced to a smallness much exceeding the perception of any of our senses; and so all that we have clear and distinct ideas of, is of what division in general or abstractedly is, and the relation of totum and parts: but of the bulk of the body, to be thus infinitely divided after certain progressions, I think, we have no clear nor distinct idea at all. For I ask any one, whether taking the smallest atom of dust he ever saw, he has any distinct idea (bating still the number, which concerns not extension) betwixt the 100,000th, and the 1,000,000th part of it. Or if he thinks he can refine his ideas to that degree, without losing sight of them, let him add ten cyphers to each of those numbers. Such a degree of smallness is not unreasonable to be supposed, since a division carried on so far brings it no nearer the end of infinite division, than the first division into two halves does. I must confess, for my part, I have no clear distinct ideas of the different bulk or extension of those bodies, having but a very obscure one of either of them. So that, I think, when we talk of division of bodies in infinitum, our idea of their

distinct bulks, which is the subject and foundation of division, comes, after a little progression, to be confounded, and almost lost in obscurity. For that idea, which is to represent only bigness, must be very obscure and confused, which we cannot distinguish from one ten times as big, but only by number; so that we have clear distinct ideas, we may say, of ten and one, but no distinct ideas of two such extensions. It is plain from hence, that when we talk of infinite divisibility of body, or extension, our distinct and clear ideas are only of numbers; but the clear distinct ideas of extension, after some progress of division, are quite lost: and of such minute parts we have no distinct ideas at all: but it returns, as all our ideas of infinite do, at last to that of number always to be added; but thereby never amounts to any distinct idea of actual infinite parts. We have, it is true, a clear idea of division, as often as we think of it; but thereby we have no more a clear idea of infinite parts in matter, than we have a clear idea of an infinite number, by being able still to add new numbers to any assigned numbers we have: endless divisibility giving us no more a clear and distinct idea of actually infinite parts, than endless addibility (if I may so speak) gives us a clear and distinct idea of an actually infinite number; they both being only in a power still of increasing the number, be it already as great as it will. So that of what remains to be added (wherein consists the infinity) we have but an obscure, imperfect, and confused idea, from or about which we can argue or reason with no certainty or clearness, no more than we can in arithmetic, about a number of which we have no such distinct idea as we have of 4 or 100; but only this relative obscure one, that compared to any other, it is still bigger: and we have no more a clear positive idea of it when we say or conceive it is bigger, or more than 400,000,000, than if we should say it is bigger than 40, or 4; 400,000,000 having no nearer a proportion to the end of addition, or number, than 4. For he that adds only 4 to 4, and so proceeds, shall as soon come to the end of all addition, as he that adds 400,000,000

to 400,000,000. And so likewise in eternity, he that has an idea of but four years, has as much a positive complete idea of eternity, as he that has one of 400,000,000 of years: for what remains of eternity beyond either of these two numbers of years is as clear to the one as the other; i.e. neither of them has any clear positive idea of it at all. For he that adds only four years to 4, and so on, shall as soon reach eternity, as he that adds 400,000,000 of years, and so on; or, if he please, doubles the increase as often as he will: the remaining abyss being still as far beyond the end of all these progressions, as it is from the length of a day or an hour. For nothing finite bears any proportion to infinite; and therefore our ideas, which are all finite, cannot bear any. Thus it is also in our idea of extension, when we increase it by addition, as well as when we diminish it by division, and would enlarge our thoughts to infinite space. After a few doublings of those ideas of extension, which are the largest we are accustomed to have, we lose the clear distinct idea of that space: it becomes a confusedly great one, with a surplus of still greater; about which, when we would argue or reason, we shall always find ourselves at a loss; confused ideas in our arguings and deductions from that part of them which is confused always leading us into confusion.

CHAP. XXX.

Of Real and Fantastical Ideas.

§ 1. BESIDES what we have already mentioned concerning ideas, other considerations belong to them, in reference to things from whence they are taken, or which they may be supposed to represent: and thus, I think, they may come under a threefold distinction; and are

Real ideas
are conform-
able to their
archetypes.

First, either real or fantastical.

Secondly, adequate or inadequate.

Thirdly, true or false.

First, by real ideas, I mean such as have a foundation in nature ; such as have a conformity with the real being and existence of things, or with their archetypes. Fantastical or chimerical I call such as have no foundation in nature, nor have any conformity with that reality of being to which they are tacitly referred as to their archetypes. If we examine the several sorts of ideas before-mentioned, we shall find, that,

§ 2. First, our simple ideas are all real,
Simple ideas all agree to the reality of things, not that
all real.

they are all of them the images or representations of what does exist ; the contrary whereof, in all but the primary qualities of bodies, hath been already shown. But though whiteness and coldness are no more in snow than pain is ; yet those ideas of whiteness and coldness, pain, &c. being in us the effects of powers in things without us, ordained by our Maker to produce in us such sensations ; they are real ideas in us, whereby we distinguish the qualities that are really in things themselves. For these several appearances being designed to be the mark, whereby we are to know and distinguish things which we have to do with, our ideas do as well serve us to that purpose, and are as real distinguishing characters, whether they be only constant effects, or else exact resemblances of something in the things themselves ; the reality lying in that steady correspondence they have with the distinct constitutions of real beings. But whether they answer to those constitutions, as to causes or patterns, it matters not ; it suffices that they are constantly produced by them. And thus our simple ideas are all real and true, because they answer and agree to those powers of things which produce them in our minds ; that being all that is requisite to make them real, and not fictitious at pleasure. For in simple ideas (as has been shown) the mind is wholly confined to the operation of things upon it and can make to itself no simple idea, more than what it has received.

§ 3. Though the mind be wholly passive in respect to its simple ideas; yet I think, we may say, it is not so in respect of its complex ideas: for those being combinations of simple ideas put together, and united under one general name; it is plain that the mind of man uses some kind of liberty in forming those complex ideas: how else comes it to pass that one man's idea of gold, or justice, is different from another's? but because he has put in or left out of his, some simple idea, which the other has not. The question then is, which of these are real, and which barely imaginary combinations? What collections agree to the reality of things, and what not? And to this I say, That,

§ 4. Secondly, mixed modes and relations having no other reality but what they have in the minds of men, there is nothing more required to this kind of ideas to make them real, but that they be so framed, that there be a possibility of existing conformable to them. These ideas themselves, being archetypes, cannot differ from their archetypes, and so cannot be chimerical, unless any one will jumble together in them inconsistent ideas. Indeed, as any of them have the names of a known language assigned to them, by which he that has them in his mind would signify them to others, so bare possibility of existing is not enough; they must have a conformity to the ordinary signification of the name that is given them, that they may not be thought fantastical: as if a man would give the name of justice to that idea, which common use calls liberality. But this fantasticalness relates more to propriety of speech, than reality of ideas: for a man to be undisturbed in danger, sedately to consider what is fittest to be done, and to execute it steadily, is a mixed mode, or a complex idea of an action which may exist. But to be undisturbed in danger, without using one's reason or industry, is what is also possible to be; and so is as real an idea as the other. Though the first of

Complex ideas are voluntary combinations.

Mixed modes made of consistent ideas, are real.

these, having the name courage given to it, may, in respect of that name, be a right or wrong idea : but the other, whilst it has not a common received name of any known language assigned to it, is not capable of any deformity, being made with no reference to any thing but itself.

§ 5. Thirdly, our complex ideas of substances being made all of them in reference to things existing without us, and intended to be representations of substances, as they really are ; are no farther real, than as they are such combinations of simple ideas, as are really united, and co-exist in things without us. On the contrary, those are fantastical which are made up of such collections of simple ideas as were really never united, never were found together in any substance ; v. g. a rational creature, consisting of a horse's head, joined to a body of human shape, or such as the centaurs are described : or, a body yellow, very malleable, fusible, and fixed ; but lighter than common water : or an uniform. unorganized body, consisting, as to sense, all of similar parts, with perception and voluntary motion joined to it. Whether such substances as these can possibly exist or no, it is probable we do not know : but be that as it will, these ideas of substances being made conformable to no pattern existing that we know, and consisting of such collections of ideas, as no substance ever showed us united together, they ought to pass with us for barely imaginary : but much more are those complex ideas so, which contain in them any inconsistency or contradiction of their parts.

Ideas of substances are real, when they agree with the existence of things.

CHAP. XXXI.

Of Adequate and Inadequate Ideas.

§ 1. OF our real ideas, some are adequate, and some are inadequate. Those I call adequate, which perfectly represent those archetypes which the mind supposes them taken from; which it intends them to stand for, and to which it refers them. Inadequate ideas are such, which are but a partial or incomplete representation of those archetypes to which they are referred. Upon which account it is plain,

§ 2. First, that all our simple ideas are adequate. Because being nothing but the effects of certain powers in things, fitted and ordained by God to produce such sensations in us, they cannot but be correspondent and adequate to those powers: and we are sure they agree to the reality of things. For if sugar produce in us the ideas which we call whiteness and sweetness, we are sure there is a power in sugar to produce those ideas in our minds, or else they could not have been produced by it. And so each sensation answering the power that operates on any of our senses, the idea so produced is a real idea, (and not a fiction of the mind, which has no power to produce any simple idea;) and cannot but be adequate, since it ought only to answer that power: and so all simple ideas are adequate. It is true, the things producing in us these simple ideas are but few of them denominated by us, as if they were only the causes of them; but as if those ideas were real beings in them. For though fire be called painful to the touch, whereby is signified the power of producing in us the idea of pain, yet it is denominated also light and hot; as if light and heat were really something in the fire more than a power to excite these ideas in us; and therefore are called qualities in, or of the fire. But these being

nothing, in truth, but powers to excite such ideas in us, I must in that sense be understood, when I speak of secondary qualities, as being in things; or of their ideas, as being the objects that excite them in us. Such ways of speaking, though accommodated to the vulgar notions, without which one cannot be well understood, yet truly signify nothing but those powers which are in things to excite certain sensations or ideas in us: since were there no fit organs to receive the impressions fire makes on the sight and touch, nor a mind joined to those organs to receive the ideas of light and heat by those impressions from the fire or sun, there would yet be no more light or heat in the world, than there would be pain, if there were no sensible creature to feel it, though the sun should continue just as it is now, and mount *Ætna* flame higher than ever it did. Solidity and extension, and the termination of it, figure, with motion and rest, whereof we have the ideas, would be really in the world as they are, whether there were any sensible being to perceive them or no: and therefore we have reason to look on those as the real modifications of matter, and such are the exciting causes of all our various sensations from bodies. But this being an inquiry not belonging to this place, I shall enter no farther into it, but proceed to show what complex ideas are adequate, and what not.

§ 3. Secondly, our complex ideas of
Modes are all adequate. modes, being voluntary collections of simple ideas, which the mind puts together without reference to any real archetypes or standing patterns existing any-where, are and cannot but be adequate ideas. Because they not being intended for copies of things really existing, but for archetypes made by the mind to rank and denominate things by, cannot want any thing: they having each of them that combination of ideas, and thereby that perfection which the mind intended they should: so that the mind acquiesces in them, and can find nothing wanting. Thus by having the idea of a figure, with three sides meeting at three angles, I have a complete idea, wherein I require nothing else to make it perfect. That the

mind is satisfied with the perfection of this its idea, is plain in that it does not conceive, that any understanding hath, or can have a more complete or perfect idea of that thing it signifies by the word triangle, supposing it to exist, than itself has in that complex idea of three sides and three angles ; in which is contained all that is, or can be essential to it, or necessary to complete it, ~~wherever~~ or however it exists. But in our ideas of substances it is otherwise. For there desiring to copy things as they really do exist, and to represent to ourselves that constitution on which all their properties depend, we perceive our ideas attain not that perfection we intend : we find they still want something we should be glad were in them ; and so are all inadequate. But mixed modes and relations, being archetypes without patterns, and so having nothing to represent but themselves, cannot but be adequate, every thing being so to itself. He that at first put together the idea of danger perceived, absence of disorder from fear, sedate consideration of what was justly to be done, and executing that without disturbance, or being deterred by the danger of it, had certainly in his mind that complex idea made up of that combination ; and intending it to be nothing else, but what is, nor to have in it any other simple ideas, but what it hath, it could not also but be an adequate idea : and laying this up in his memory, with the name courage annexed to it, to signify to others, and denominate from thence any action he should observe to agree with it, had thereby a standard to measure and denominate actions by, as they agreed to it. This idea thus made, and laid up for a pattern, must necessarily be adequate, being referred to nothing else but itself, nor made by any other original, but the good-liking and will of him that first made this combination.

§ 4. Indeed another coming after, and in conversation learning from him the word courage, may make an idea, to which he gives the name courage, different from what the first author applied it to, and has in his mind, when he uses it. And in

Modes, in reference to settled names, may be inadequate.

this case, if he designs that his idea in thinking should be conformable to the other's idea, as the name he uses in speaking is conformable in sound to his, from whom he learned it, his idea may be very wrong and inadequate: because in this case, making the other man's idea the pattern of his idea in thinking, as the other man's word or sound is the pattern of his in speaking, his idea is so far defective and inadequate, as it is distant from the archetype and pattern he refers it to, and intends to express and signify by the name he uses for it; which name he would have to be a sign of the other man's idea (to which, in its proper use, it is primarily annexed) and of his own, as agreeing to it: to which, if his own does not exactly correspond, it is faulty and inadequate.

§ 5. Therefore these complex ideas of modes, when they are referred by the mind, and intended to correspond to the ideas in the mind of some other intelligent being, expressed by the names we apply to them, they may be very deficient, wrong, and inadequate; because they agree not to that, which the mind designs to be their archetype and pattern: in which respect only, any idea of modes can be wrong, imperfect, or inadequate. And on this account our ideas of mixed modes are the most liable to be faulty of any other; but this refers more to proper speaking, than knowing right.

Ideas of substances, as referred to real essences not adequate. § 6. Thirdly, what ideas we have of substances, I have above showed. Now those ideas have in the mind a double reference: 1. Sometimes they are referred to a supposed real essence of each species of things. 2. Sometimes they are only designed to be pictures and representations in the mind of things that do exist by ideas of those qualities that are discoverable in them. In both which ways, these copies of those originals and archetypes are imperfect and inadequate.

First, it is usual for men to make the names of substances stand for things, as supposed to have certain real essences, whereby they are of this or that

species: and names standing for nothing but the ideas that are in men's minds, they must constantly refer their ideas to such real essences, as to their archetypes. That men (especially such as have been bred up in the learning taught in this part of the world) do suppose certain specific essences of substances, which each individual, in its several kinds, is made conformable to, and partakes of; is so far from needing proof, that it will be thought strange if any one should do otherwise. And thus they ordinarily apply the specific names they rank particular substances under to things, as distinguished by such specific real essences. Who is there almost, who would not take it amiss, if it should be doubted, whether he called himself a man, with any other meaning, than as having the real essence of a man; and yet if you demand what those real essences are, it is plain men are ignorant, and know them not. From whence it follows, that the ideas they have in their minds, being referred to real essences, as to archetypes which are unknown, must be so far from being adequate, that they cannot be supposed to be any representation of them at all. The complex ideas we have of substances are, as it has been shown, certain collections of simple ideas that have been observed or supposed constantly to exist together. But such a complex idea cannot be the real essence of any substance; for then the properties we discover in that body would depend on that complex idea, and be deducible from it, and their necessary connection with it be known; as all properties of a triangle depend on, and, as far as they are discoverable, are deducible from the complex idea of three lines, including a space. But it is plain, that in our complex ideas of substances are not contained such ideas, on which all the other qualities, that are to be found in them do depend. The common idea men have of iron, is a body of a certain colour, weight and hardness; and a property that they look on as belonging to it, is malleableness. But yet this property has no necessary connection with that complex idea, or any part of it; and there is no more reason to think that malleableness depends on that colour, weight,

and hardness, than that colour, or that weight depends on its malleableness. And yet, though we know nothing of these real essences, there is nothing more ordinary, than that men should attribute the sorts of things to such essences. The particular parcel of matter, which makes the ring I have on my finger, is forwardly, by most men, supposed to have a real essence, whereby it is gold; and from whence those qualities flow which I find in it, viz. its peculiar colour, weight, hardness, fusibility, fixedness, and change of colour upon a slight touch of mercury, &c. This essence, from which all these properties flow, when I inquire into it and search after it, I plainly perceive I cannot discover: the farthest I can go is only to presume, that it being nothing but body, its real essence, or internal constitution, on which these qualities depend, can be nothing but the figure, size, and connection of its solid parts; of neither of which having any distinct perception at all, can I have any idea of its essence, which is the cause that it has that particular shining yellowness, a greater weight than any thing I know of the same bulk, and a fitness to have its colour changed by the touch of quicksilver. If any one will say, that the real essence and internal constitution, on which these properties depend, is not the figure, size, and arrangement or connexion of its solid parts, but something else, called its particular form; I am farther from having any idea of its real essence, than I was before: for I have an idea of figure, size, and situation of solid parts in general, though I have none of the particular figure, size, or putting together of parts, whereby the qualities above-mentioned are produced; which qualities I find in that particular parcel of matter that is on my finger, and not in another parcel of matter, with which I cut the pen I write with. But when I am told, that something besides the figure, size, and posture of the solid parts of that body, is its essence, something called substantial form; of that, I confess, I have no idea at all, but only of the sound form, which is far enough from an idea of its real essence, or constitution. The like ignorance as I have of the real essence of

this particular substance, I have also of the real essence of all other natural ones; of which essences, I confess, I have no distinct ideas at all; and I am apt to suppose others, when they examine their own knowledge, will find in themselves, in this one point, the same sort of ignorance.

§ 7. Now then, when men apply to this particular parcel of matter on my finger, a general name already in use, and denominate it gold, do they not ordinarily, or are they not understood to give it that name as belonging to a particular species of bodies, having a real internal essence; by having of which essence, this particular substance comes to be of that species, and to be called by that name? If it be so, as it is plain it is, the name, by which things are marked, as having that essence, must be referred primarily to that essence; and consequently the idea to which that name is given, must be referred also to that essence, and be intended to represent it. Which essence, since they, who so use the names, know not, their ideas of substances must be all inadequate in that respect, as not containing in them that real essence which the mind intends they should.

§ 8. Secondly, those who neglecting that useless supposition of unknown real es- Ideas of substances, as collections of their qualities, are all inadequate. sences, whereby they are distinguished, endeavour to copy the substances that exist in the world, by putting together the ideas of those sensible qualities which are found co-existing in them, though they come much nearer a likeness of them, than those who imagine they know not what real specific essences; yet they arrive not at perfectly adequate ideas of those substances they would thus copy into their minds; nor do those copies exactly and fully contain all that is to be found in their archetypes. Because those qualities, and powers of substances, whereof we make their complex ideas, are so many and various, that no man's complex idea contains them all. That our abstract ideas of substances do not contain in them all the simple ideas that are united in the things themselves, it is evident, in that

men do rarely put into their complex idea of any substance, all the simple ideas they do know to exist in it. Because endeavouring to make the signification of their names as clear, and as little cumbersome as they can, they make their specific ideas of the sorts of substance, for the most part, of a few of those simple ideas which are to be found in them : but these having no original precedency, or right to be put in, and make the specific idea more than others that are left out, it is plain that both these ways our ideas of substances are deficient and inadequate. The simple ideas, whereof we make our complex ones of substances, are all of them (bating only the figure and bulk of some sorts) powers, which being relations to other substances, we can never be sure that we know all the powers that are in any one body, till we have tried what changes it is fitted to give to, or receive from other substances, in their several ways of application : which being impossible to be tried upon any one body, much less upon all, it is impossible we should have adequate ideas of any substance, made up of a collection of all its properties.

§ 9. Whosoever first lighted on a parcel of that sort of substance we denote by the word gold, could not rationally take the bulk and figure he observed in that lump to depend on its real essence or internal constitution. Therefore those never went into his idea of that species of body ; but its peculiar colour, perhaps, and weight, were the first he abstracted from it, to make the complex idea of that species. Which both are but powers ; the one to affect our eyes after such a manner, and to produce in us that idea we call yellow ; and the other to force upwards any other body of equal bulk ; they being put into a pair of equal scales, one against another. Another perhaps added to these the ideas of fusibility and fixedness, two other passive powers, in relation to the operation of fire upon it ; another, its ductility and solubility in aq. regia, two other powers relating to the operation of other bodies, in changing its outward figure, or separation of it into insensible parts. These, or part of these, put toge-

ther, usually make the complex idea in men's minds of that sort of body we call gold.

§ 10. But no one, who hath considered the properties of bodies in general, or this sort in particular, can doubt that this called gold has infinite other properties not contained in that complex idea. Some who have examined this species more accurately, could, I believe, enumerate ten times as many properties in gold, all of them as inseparable from its internal constitution, as its colour or weight: and it is probable, if any one knew all the properties that are by divers men known of this metal, there would be an hundred times as many ideas go to the complex idea of gold, as any one man yet has in his; and yet perhaps that not be the thousandth part of what is to be discovered in it. The changes which that one body is apt to receive, and make in other bodies, upon a due application, exceeding far not only what we know, but what we are apt to imagine. Which will not appear so much a paradox to any one, who will but consider how far men are yet from knowing all the properties of that one, no very compound figure, a triangle; though it be no small number that are already by mathematicians discovered of it.

§ 11. So that all our complex ideas of substances are imperfect and inadequate. Which would be so also in mathematical figures, if we were to have our complex ideas of them, only by collecting their properties in reference to other figures. How uncertain and imperfect would our ideas be of an ellipsis, if we had no other idea of it, but some few of its properties? Whereas having in our plain idea the whole essence of that figure, we from thence discover those properties, and demonstratively see how they flow, and are inseparable from it.

§ 12. Thus the mind has three sorts of abstract ideas or nominal essences: Simple ideas, *ἰδιότης*, and adequate.

First, simple ideas, which are *ἔκτυπα*, or copies; but yet certainly adequate. Because being intended to express nothing but the power in things to

produce in the mind such a sensation, that sensation, when it is produced, cannot but be the effect of that power. So the paper I write on, having the power, in the light (I speak according to the common notion of light) to produce in men the sensation which I call white, it cannot but be the effect of such a power, in something without the mind; since the mind has not the power to produce any such idea in itself, and being meant for nothing else but the effect of such a power, that simple idea is real and adequate; the sensation of white, in my mind, being the effect of that power, which is in the paper to produce it, is perfectly adequate to that power; or else, that power would produce a different idea

Ideas of substances are *εἰδωλα*, inadequate. § 13. Secondly, the complex ideas of substances are ectypes, copies too; but not perfect ones, not adequate: which is very evident to the mind, in that it plainly perceives that whatever collection of simple ideas it makes of any substance that exists, it cannot be sure that it exactly answers all that are in that substance: since not having tried all the operations of all other substances upon it, and found all the alterations it would receive from, or cause in, other substances, it cannot have an exact adequate collection of all its active and passive capacities; and so not have an adequate complex idea of the powers of any substance existing, and its relations, which is that sort of complex idea of substances we have. And after all, if we would have, and actually had, in our complex idea, an exact collection of all the secondary qualities or powers of any substance, we should not yet thereby have an idea of the essence of that thing. For since the powers or qualities that are observable by us, are not the real essence of that substance, but depend on it, and flow from it, any collection whatsoever of these qualities cannot be the real essence of that thing. Whereby it is plain, that our ideas of substances are not adequate; are not what the mind intends them to be. Besides, a man has no idea of substance in general, nor knows what substance is in itself.

§ 14. Thirdly, complex ideas of modes and relations are originals, and archetypes; are not copies, nor made after the pattern of any real existence, to which the mind intends them to be conformable, and exactly to answer. These being such collections of simple ideas, that the mind itself puts together, and such collections, that each of them contains in it precisely all that the mind intends that it should, they are archetypes and essences of modes that may exist; and so are designed only for, and belong only to, such modes as, when they do exist, have an exact conformity with those complex ideas. The ideas therefore of modes and relations cannot but be adequate.

Ideas of modes and relations are archetypes, and cannot but be adequate.

CHAP. XXXII.

Of true and false Ideas.

§ 1. **THOUGH** truth and falsehood belong, in propriety of speech, only to propositions; yet ideas are oftentimes termed true or false (as what words are there, that are not used with great latitude, and with some deviation from their strict and proper significations?) Truth and falsehood properly belong to propositions. Though, I think, that when ideas themselves are termed true or false, there is still some secret or tacit proposition, which is the foundation of that denomination: as we shall see, if we examine the particular occasions wherein they come to be called true or false. In all which, we shall find some kind of affirmation or negation, which is the reason of that denomination. For our ideas, being nothing but bare appearances or perceptions in our minds, cannot properly and simply in themselves be said to be true or false, no more than a single name of any thing can be said to be true or false.

Metaphysical truth contains a tacit proposition.

§ 2. Indeed both ideas and words may be said to be true in a metaphysical sense of the word truth, as all other things, that any way exist, are said to be true; i. e. really to be such as they exist. Though in things called true, even in that sense, there is perhaps a secret reference to our ideas, looked upon as the standards of that truth, which amounts to a mental proposition, though it be usually not taken notice of.

No idea, as an appearance in the mind, true or false.

§ 3. But it is not in that metaphysical sense of truth which we inquire here, when we examine whether our ideas are capable of being true or false; but in the more ordinary acceptation of those words: and so I say, that the ideas in our minds being only so many perceptions, or appearances there, none of them are false: the idea of a centaur having no more falsehood in it, when it appears in our minds, than the name centaur has falsehood in it, when it is pronounced by our mouths, or written on paper. For truth or falsehood lying always in some affirmation, or negation, mental or verbal, our ideas are not capable, any of them, of being false, till the mind passes some judgment on them; that is, affirms or denies something of them.

Ideas referred to any thing may be true or false.

§ 4. Whenever the mind refers any of its ideas to any thing extraneous to them, they are then capable to be called true or false. Because the mind in such a reference makes a tacit supposition of their conformity to that thing: which supposition, as it happens to be true or false, so the ideas themselves come to be denominated. The most usual cases wherein this happens, are these following:

Other men's ideas, real existence, and supposed real essences, are what men usually refer their ideas to.

§ 5. First, when the mind supposes any idea it has conformable to that in other men's minds, called by the same common name; v. g. when the mind intends or judges its ideas of justice, temperance, religion, to be the same with what other men give those names to.

Secondly, when the mind supposes any idea it has in itself to be conformable to some real existence. Thus the two ideas, of a man and a centaur, supposed to be the ideas of real substances, are the one true, and the other false; the one having a conformity to what has really existed, the other not.

Thirdly, when the mind refers any of its ideas to that real constitution and essence of any thing, whereon all its properties depend: and thus the greatest part, if not all our ideas of substances, are false.

§ 6. These suppositions the mind is very apt tacitly to make concerning its own ideas. But yet, if we will examine it, we shall find it is chiefly, if not only, concerning its abstract complex ideas. For the natural tendency of the mind being towards knowledge; and finding that if it should proceed by and dwell upon only particular things, its progress would be very slow, and its work endless; therefore to shorten its way to knowledge, and make each perception more comprehensive; the first thing it does, as the foundation of the easier enlarging its knowledge, either by contemplation of the things themselves that it would know, or conference with others about them, is to bind them into bundles, and rank them so into sorts, that what knowledge it gets of any of them, it may thereby with assurance extend to all of that sort; and so advance by larger steps in that, which is its great business, knowledge. This, as I have elsewhere shown, is the reason why we collect things under comprehensive ideas, with names annexed to them, into genera and species, i. e. into kinds and sorts.

§ 7. If therefore we will warily attend to the motions of the mind, and observe what course it usually takes in its way to knowledge; we shall, I think, find that the mind having got an idea, which it thinks it may have use of, either in contemplation or discourse, the first thing it does is to abstract it, and then get a name to it; and so lay it up in its store-house, the memory, as containing the essence of a sort of things, of which that name is always to be the mark. Hence

it is that we may often observe, that when any one sees a new thing of a kind that he knows not, he presently asks what it is, meaning by that inquiry nothing but the name. As if the name carried with it the knowledge of the species, or the essence of it; whereof it is indeed used as the mark, and is generally supposed annexed to it.

Cause of
such refer-
ences.

§ 8. But this abstract idea being something in the mind between the thing that exists, and the name that is given to it; it is in our ideas, that both the rightness of our knowledge, and the propriety or intelligibleness of our speaking, consists. And hence it is, that men are so forward to suppose, that the abstract ideas they have in their minds are such as agree to the things existing without them, to which they are referred; and are the same also, to which the names they give them do by the use and propriety of that language belong. For without this double conformity of their ideas, they find they should both think amiss of things in themselves, and talk of them unintelligibly to others.

Simple ideas
may be false
in reference
to others of
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ble to be so.

§ 9. First then, I say, that when the truth of our ideas is judged of, by the conformity they have to the ideas which other men have, and commonly signify by the same name, they may be any of them false. But yet simple ideas are least of all liable to be so mistaken; because a man by his senses, and every day's observation, may easily satisfy himself what the simple ideas are, which their several names that are in common use stand for; they being but few in number, and such as if he doubts or mistakes in, he may easily rectify by the objects they are to be found in. Therefore it is seldom, that any one mistakes in his names of simple ideas; or applies the name red to the idea green; or the name sweet to the idea bitter: much less are men apt to confound the names of ideas belonging to different senses; and call a colour by the name of a taste, &c. whereby it is evident, that the simple ideas they call by any name, are commonly

the same that others have and mean when they use the same names.

§ 10. Complex ideas are much more liable to be false in this respect : and the complex ideas of mixed modes, much more than those of substances : because in substances (especially those which the common and unborrowed names of any language are applied to) some remarkable sensible qualities, serving ordinarily to distinguish one sort from another, easily preserve those, who take any care in the use of their words, from applying them to sorts of substances, to which they do not at all belong. But in mixed modes we are much more uncertain ; it being not so easy to determine of several actions, whether they are to be called justice or cruelty, liberality or prodigality. And so in referring our ideas to those of other men, called by the same names, ours may be false ; and the idea in our minds, which we express by the word justice, may perhaps be that which ought to have another name.

§ 11. But whether or no our ideas of mixed modes are more liable than any sort to be different from those of other men, which are marked by the same names ; this at least is certain, that this sort of falsehood is much more familiarly attributed to our ideas of mixed modes, than to any other. When a man is thought to have a false idea of justice, or gratitude, or glory, it is for no other reason, but that his agrees not with the ideas which each of those names are the signs of in other men.

§ 12. The reason whereof seems to me to be this, that the abstract ideas of mixed modes, being men's voluntary combinations of such a precise collection of simple ideas ; and so the essence of each species being made by men alone, whereof we have no other sensible standard existing any where, but the name itself, or the definition of that name : we have nothing else to refer these our ideas of mixed modes to, as a standard to which we would conform them, but the ideas of those who are thought to use those names in their most proper significations ; and so as our ideas conform or differ from them, they pass for true or false,

And thus much concerning the truth and falsehood of our ideas, in reference to their names.

As referred to real existences, none of our ideas can be false, but those of substances. § 13. Secondly, as to the truth and falsehood of our ideas, in reference to the real existence of things; when that is made the standard of their truth, none of them can be termed false, but only our complex ideas of substances.

First, simple ideas in this sense not false, and why. § 14. First, our simple ideas being barely such perceptions as God has fitted us to receive, and given power to external objects to produce in us by established laws and ways, suitable to his wisdom and goodness, though incomprehensible to us, their truth consists in nothing else but in such appearances as are produced in us, and must be suitable to those powers he has placed in external objects, or else they could not be produced in us: and thus answering those powers, they are what they should be, true ideas. Nor do they become liable to any imputation of falsehood, if the mind (as in most men I believe it does) judges these ideas to be in the things themselves. For God, in his wisdom, having set them as marks of distinction in things, whereby we may be able to discern one thing from another, and so choose any of them for our uses, as we have occasion; it alters not the nature of our simple idea, whether we think that the idea of blue be in the violet itself, or in our mind only; and only the power of producing it by the texture of its parts, reflecting the particles of light after a certain manner, to be in the violet itself. For that texture in the object, by a regular and constant operation, producing the same idea of blue in us, it serves us to distinguish, by our eyes, that from any other thing, whether that distinguishing mark, as it is really in the violet, be only a peculiar texture of parts, or else that very colour, the idea whereof (which is in us) is the exact resemblance. And it is equally from that appearance to be denominated blue, whether it be that real colour, or only a peculiar texture in it, that causes in us that idea: since the name blue notes properly nothing but that mark of distinction that is in a violet, discernible only by our eyes, whatever it consists in:

that being beyond our capacities distinctly to know, and perhaps would be of less use to us, if we had faculties to discern.

§ 15. Neither would it carry any imputation of falsehood to our simple ideas, if by the different structure of our organs it were so ordered, that the same object should produce in several men's minds different ideas at the same time: v. g. if the idea that a violet produced in one man's mind by his eyes were the same that a marygold produced in another man's, and vice versa. For since this could never be known, because one man's mind could not pass into another man's body, to perceive what appearances were produced by those organs; neither the ideas hereby, nor the names would be at all confounded, or any falsehood be in either. For all things that had the texture of a violet, producing constantly the idea that he called blue; and those which had the texture of a marygold, producing constantly the idea which he as constantly called yellow; whatever those appearances were in his mind, he would be able as regularly to distinguish things for his use by those appearances, and understand and signify those distinctions marked by the names blue and yellow, as if the appearances, or ideas in his mind, received from those two flowers, were exactly the same with the ideas in other men's minds. I am nevertheless very apt to think, that the sensible ideas produced by any object in different men's minds, are most commonly very near and undiscernibly alike. For which opinion, I think, there might be many reasons offered: but that being besides my present business, I shall not trouble my reader with them: but only mind him, that the contrary supposition, if it could be proved, is of little use, either for the improvement of our knowledge, or conveniency of life; and so we need not trouble ourselves to examine it.

§ 16. From what has been said concerning our simple ideas, I think it evident, that our simple ideas can none of them be false in respect of things existing without us. For the

First, simple ideas in this sense not false, and why.

truth of these appearances; or perceptions in our minds, consisting, as has been said, only in their being answerable to the powers in external objects to produce by our senses such appearances in us; and each of them being in the mind, such as it is, suitable to the power that produced it, and which alone it represents; it cannot upon that account, or as referred to such a pattern, be false. Blue and yellow, bitter or sweet, can never be false ideas: these perceptions in the mind are just such as they are there, answering the powers appointed by God to produce them; and so are truly what they are, and are intended to be. Indeed the names may be misapplied: but that in this respect makes no falsehood in the ideas; as if a man ignorant in the English tongue should call purple scarlet.

Secondly, § 17. Secondly, neither can our complex ideas of modes, in reference to the essence of any thing really existing, be false. Because whatever complex idea I have of any mode, it hath no reference to any pattern existing, and made by nature: it is not supposed to contain in it any other ideas than what it hath; nor to represent any thing but such a complication of ideas as it does. Thus when I have the idea of such an action of a man, who forbears to afford himself such meat, drink, and clothing, and other conveniencies of life, as his riches and estate will be sufficient to supply; and his station requires, I have no false idea; but such an one as represents an action, either as I find or imagine it; and so is capable of neither truth or falsehood. But when I give the name frugality or virtue to this action, then it may be called a false idea, if thereby it be supposed to agree with that idea, to which, in propriety of speech, the name of frugality doth belong: or to be conformable to that law, which is the standard of virtue and vice.

Thirdly, § 18. Thirdly, our complex ideas of substances, being all referred to patterns in things themselves, may be false. That they are all false, when looked upon as the representations of the unknown essences of things, is so

evident that there needs nothing to be said of it. I shall therefore pass over that chimerical supposition, and consider them as collections of simple ideas in the mind taken from combinations of simple ideas existing together constantly in things, of which patterns they are the supposed copies: and in this reference of them to the existence of things, they are false ideas. 1. When they put together simple ideas, which in the real existence of things have no union; as when to the shape and size that exist together in a horse is joined, in the same complex idea, the power of barking like a dog: which three ideas, however put together into one in the mind, were never united in nature; and this therefore may be called a false idea of a horse. 2. Ideas of substances are, in this respect, also false, when from any collection of simple ideas that do always exist together, there is separated, by a direct negation, any other simple idea which is constantly joined with them. Thus, if to extension, solidity, fusibility, the peculiar weightiness, and yellow colour of gold, any one join in his thoughts the negation of a greater degree of fixedness than is in lead or copper, he may be said to have a false complex idea, as well as when he joins to those other simple ones the idea of a perfect absolute fixedness. For either way, the complex idea of gold being made up of such simple ones as have no union in nature, may be termed false. But if we leave out of this his complex idea, that of fixedness quite, without either actually joining to, or separating of it from the rest in his mind, it is, I think, to be looked on as an inadequate and imperfect idea, rather than a false one; since though it contains not all the simple ideas that are united in nature, yet it puts none together but what do really exist together.

§ 19. Though in compliance with the ordinary way of speaking I have showed in what sense, and upon what ground our ideas may be sometimes called true or false; yet if we will look a little nearer into the matter, in all cases where any idea is called true or false, it is from some judgment that the mind

Truth or
falsehood
always sup-
poses affir-
mation or
negation.

makes, or is supposed to make, that is true or false. For truth or falsehood, being never without some affirmation or negation, express or tacit, it is not to be found but where signs are joined and separated according to the agreement or disagreement of the things they stand for. The signs we chiefly use are either ideas or words, wherewith we make either mental or verbal propositions. Truth lies in so joining or separating these representatives, as the things they stand for do in themselves agree or disagree; and falsehood in the contrary, as shall be more fully shown hereafter.

Ideas in
themselves
neither true
nor false.

§ 20. Any idea then which we have in our minds, whether conformable or not to the existence of things, or to any idea in the minds of other men, cannot properly for

this alone be called false. For these representations, if they have nothing in them but what is really existing in things without, cannot be thought false, being exact representations of something: nor yet, if they have any thing in them differing from the reality of things, can they properly be said to be false representations, or ideas of things they do not represent. But the mistake and falsehood is,

But are false,
1. When
judged
agreeable to
another
man's idea,
without be-
ing so.

§ 21. First, when the mind having any idea, it judges and concludes in the same that is in other men's minds, signified by the same name; or that it is conformable to the ordinary received signification or definition of that word, when indeed it is not; which is the most usual mistake in mixed modes, though other ideas also are liable to it.

2. When
judged to
agree to real
existence,
when they
do not.

§ 22. Secondly, when it having a complex idea made up of such a collection of simple ones as nature never puts together, it judges it to agree to a species of creatures really existing; as when it joins the weight of tin to the colour, fusibility, and fixedness of gold.

3. When
judged ade-
quate, with-
out being so.

§ 23. Thirdly, when, in its complex idea it has united a certain number of simple ideas that do really exist together in

some sort of creatures, but has also left out others as much inseparable, it judges this to be a perfect complete idea of a sort of things which really it is not; v. g. having joined the ideas of substance, yellow, malleable, most heavy, and fusible, it takes that complex idea to be the complete idea of gold, when yet its peculiar fixedness and solubility in aqua regia are as inseparable from those other ideas or qualities of that body, as they are from one another.

§ 24. Fourthly, the mistake is yet greater, 4. When when I judge, that this complex idea contains in it the real essence of any body existing, when at least it contains but some few of those properties which flow from its real essence and constitution. I say, only some few of those properties; for those properties consisting mostly in the active and passive powers it has, in reference to other things, all that are vulgarly known of any one body of which the complex idea of that kind of things is usually made, are but a very few, in comparison of what a man, that has several ways tried and examined it, knows of that one sort of things: and all that the most expert man knows are but a few, in comparison of what are really in that body, and depend on its internal or essential constitution. The essence of a triangle lies in a very little compass, consists in a very few ideas: three lines including a space make up that essence: but the properties that flow from this essence are more than can be easily known or enumerated. So I imagine it is in substances, their real essences lie in a little compass, though the properties flowing from that internal constitution are endless.

§ 25. To conclude, a man having no notion of any thing without him, but by the idea he has of it in his mind (which idea he has a power to call by what name he pleases) he may indeed make an idea neither answering the reason of things, nor agreeing to the idea commonly signified by other people's words; but cannot make a wrong or false idea of a thing, which is no otherwise known to him but by the idea he has of it: v. g. when I frame an idea

Ideas, when false.

of the legs, arms, and body of a man, and join to this a horse's head and neck, I do not make a false idea of any thing; because it represents nothing without me. But when I call it a man or Tartar, and imagine it to represent some real being without me, or to be the same idea that others call by the same name; in either of these cases I may err. And upon this account it is, that it comes to be termed a false idea; though indeed the falsehood lies not in the idea, but in that tacit mental proposition, wherein a conformity and resemblance is attributed to it, which it has not. But yet, if having framed such an idea in my mind, without thinking either that existence, or the name man or Tartar, belongs to it, I will call it man or Tartar, I may be justly thought fantastical in the naming, but not erroneous in my judgment; nor the idea any way false.

More properly to be called right or wrong.

§ 26. Upon the whole matter, I think, that our ideas, as they are considered by the mind, either in reference to the proper signification of their names, or in reference to the reality of things, may very fitly be called right or wrong ideas, according as they agree or disagree to those patterns to which they are referred. But if any one had rather call them true or false, it is fit he use a liberty, which every one has, to call things by those names he thinks best; though, in propriety of speech, truth or falsehood will, I think, scarce agree to them, but as they, some way or other, virtually contain in them some mental proposition. The ideas that are in a man's mind, simply considered, cannot be wrong, unless complex ones, wherein inconsistent parts are jumbled together. All other ideas are in themselves right, and the knowledge about them right and true knowledge: but when we come to refer them to any thing, as to their patterns and archetypes, then they are capable of being wrong, as far as they disagree with such archetypes.

CHAP. XXXIII.

Of the Association of Ideas.

§ 1. THERE is scarce any one that does not observe something that seems odd to him, and is in itself really extravagant in the opinions, reasonings, and actions of other men. Something unreason-able in most The least flaw of this kind, if at all different from his own, every one is quick-sighted enough to espy in another, and will by the authority of reason forwardly condemn, though he be guilty of much greater unreasonableness in his own tenets and conduct, which he never perceives, and will very hardly, if at all, be convinced of.

§ 2. This proceeds not wholly from self-love, though that has often a great hand in it. Not wholly from self-love. Men of fair minds, and not given up to the over-weening of self-flattery, are frequently guilty of it; and in many cases one with amazement hears the arguings, and is astonished at the obstinacy of a worthy man, who yields not to the evidence of reason, though laid before him as clear as day-light.

§ 3. This sort of unreasonableness is usually imputed to education and prejudice, Not from education. and for the most part truly enough, though that reaches not the bottom of the disease, nor shows distinctly enough whence it rises, or wherein it lies. Education is often rightly assigned for the cause, and prejudice is a good general name for the thing itself: but yet, I think, he ought to look a little farther, who would trace this sort of madness to the root it springs from, and so explain it, as to show whence this flaw has its original in very sober and rational minds, and wherein it consists.

§ 4. I shall be pardoned for calling it by so harsh a name as madness, when it is considered, that opposition to reason de- A degree of madness.

serves that name, and is really madness; and there is scarce a man so free from it, but that if he should always, on all occasions, argue or do as in some cases he constantly does, would not be thought fitter for Bedlam than civil conversation. I do not here mean when he is under the power of an unruly passion, but in the steady calm course of his life. That which will yet more apologize for this harsh name, and ungrateful imputation on the greatest part of mankind, is, that inquiring a little by the by into the nature of madness, b. ii. c. xi. § 13. I found it to spring from the very same root, and to depend on the very same cause we are here speaking of. This consideration of the thing itself, at a time when I thought not the least on the subject which I am now treating of, suggested it to me. And if this be a weakness to which all men are so liable; if this be a taint which so universally infects mankind; the greater care should be taken to lay it open under its due name, thereby to excite the greater care in its prevention and cure.

From a wrong connexion of ideas. § 5. Some of our ideas have a natural correspondence and connexion one with another: it is the office and excellency of our reason to trace these, and hold them together in that union and correspondence which is founded in their peculiar beings. Besides this, there is another connexion of ideas wholly owing to chance or custom: ideas, that in themselves are not all of kin, come to be so united in some men's minds, that it is very hard to separate them; they always keep in company, and the one no sooner at any time comes into the understanding, but its associate appears with it; and if they are more than two, which are thus united, the whole gang, always inseparable, show themselves together.

This connexion how made. § 6. This strong combination of ideas, not allied by nature, the mind makes in itself either voluntarily or by chance; and hence it comes in different men to be very different, according to their different inclinations, education, interests, &c. Custom settles habits of thinking in the

understanding, as well as of determining in the will, and of motions in the body; all which seems to be but trains of motion in the animal spirits, which once set a-going, continue in the same steps they have been used to: which, by often treading, are worn into a smooth path, and the motion in it becomes easy, and as it were natural. As far as we can comprehend thinking, thus ideas seem to be produced in our minds; or if they are not, this may serve to explain their following one another in an habitual train, when once they are put into their track, as well as it does to explain such motions of the body. A musician used to any tune will find, that let it but once begin in his head, the ideas of the several notes of it will follow one another orderly in his understanding, without any care or attention, as regularly as his fingers move orderly over the keys of the organ to play out the tune he has begun, though his unattentive thoughts be elsewhere a wandering. Whether the natural cause of these ideas, as well as of that regular dancing of his fingers, be the motion of his animal spirits, I will not determine, how probable soever, by this instance, it appears to be so: but this may help us a little to conceive of intellectual habits, and of the tying together of ideas.

§ 7. That there are such associations of them made by custom in the minds of most men I think nobody will question, who has well considered himself or others; and to this, perhaps, might be justly attributed most of the sympathies and antipathies observable in men, which work as strongly, and produce as regular effects as if they were natural; and are therefore called so, though they at first had no other original but the accidental connexion of two ideas, which either the strength of the first impression, or future indulgence so united, that they always afterwards kept company together in that man's mind, as if they were but one idea. I say most of the antipathies, I do not say all, for some of them are truly natural, depend upon our original constitution, and are born with us; but a great part of those which are counted natural, would have been known to

Some antipathies an effect of it.

be from unheeded, though, perhaps, early impressions, or wanton fancies at first, which would have been acknowledged the original of them, if they had been warily observed. A grown person surfeiting with honey, no sooner hears the name of it, but his fancy immediately carries sickness and qualms to his stomach, and he cannot bear the very idea of it; other ideas of dislike, and sickness, and vomiting, presently accompany it, and he is disturbed, but he knows from whence to date this weakness, and can tell how he got this indisposition. Had this happened to him by an over-dose of honey, when a child, all the same effects would have followed, but the cause would have been mistaken, and the antipathy counted natural.

§ 8. I mention this not out of any great necessity there is, in this present argument, to distinguish nicely between *natural* and *acquired* antipathies; but I take notice of it for another purpose, viz. that those who have children, or the charge of their education, would think it worth their while diligently to watch, and carefully to prevent the undue connexion of ideas in the minds of young people. This is the time most susceptible of lasting impressions: and though those relating to the health of the body are by discreet people minded and fenced against, yet I am apt to doubt, that those which relate more peculiarly to the mind, and terminate in the understanding or passions, have been much less heeded than the thing deserves: nay, those relating purely to the understanding have, as I suspect, been by most men wholly overlooked.

A great
cause of
errors. § 9. This wrong connexion in our minds of ideas in themselves loose and independent of one another, has such an influence, and is of so great force to set us awry in our actions, as well moral as natural, passions, reasonings, and notions themselves, that perhaps there is not any one thing that deserves more to be looked after.

Instances. § 10. The ideas of goblins and sprights have really no more to do with darkness than light; yet let but a foolish maid inculcate these often on the mind of a child, and raise them there to-

gether, possibly he shall never be able to separate them again so long as he lives : but darkness shall ever afterwards bring with it those frightful ideas, and they shall be so joined, that he can no more bear the one than the other.

§ 11. A man receives a sensible injury from another, thinks on the man and that action over and over; and by ruminating on them strongly, or much in his mind, so cements those two ideas together, that he makes them almost one : never thinks on the man, but the pain and displeasure he suffered comes into his mind with it, so that he scarce distinguishes them, but has as much an aversion for the one as the other. Thus hatreds are often begotten from slight and innocent occasions, and quarrels propagated and continued in the world.

§ 12. A man has suffered pain or sickness in any place : he saw his friend die in such a room ; though these have in nature nothing to do one with another, yet when the idea of the place occurs to his mind, it brings (the impression being once made) that of the pain and displeasure with it ; he confounds them in his mind, and can as little bear the one as the other.

§ 13. When this combination is settled, and while it lasts, it is not in the power of reason to help us, and relieve us from the effects of it. Ideas in our minds, when they are there, will operate according to their natures and circumstances ; and here we see the cause why time cures certain affections, which reason, though in the right, and allowed to be so, has not power over, nor is able against them to prevail with those who are apt to hearken to it in other cases. The death of a child, that was the daily delight of his mother's eyes, and joy of her soul, rends from her heart the whole comfort of her life, and gives her all the torment imaginable : use the consolations of reason in this case, and you were as good preach ease to one on the rack, and hope to allay, by rational discourses, the pain of his joints tearing asunder. Till time has by disuse separated the sense of that enjoy-

Why time cures some disorders in the mind, which reason cannot.

ment, and its loss, from the idea of the child returning to her memory, all representations, though ever so reasonable, are in vain; and therefore some in whom the union between these ideas is never dissolved, spend their lives in mourning, and carry an incurable sorrow to their graves.

Farther instances of the effect of the association of ideas. § 14. A friend of mine knew one perfectly cured of madness by a very harsh and offensive operation. The gentleman, who was thus recovered, with great sense of gratitude and acknowledgment, owned the cure all his life after, as the greatest obligation he could have received; but whatever gratitude and reason suggested to him, he could never bear the sight of the operator: that image brought back with it the idea of that agony which he suffered from his hands, which was too mighty and intolerable for him to endure.

§ 15. Many children imputing the pain they endured at school to their books they were corrected for, so join those ideas together, that a book becomes their aversion, and they are never reconciled to the study and use of them all their lives after: and thus reading becomes a torment to them, which otherwise possibly they might have made the great pleasure of their lives. There are rooms convenient enough, that some men cannot study in, and fashions of vessels, which though ever so clean and commodious, they cannot drink out of, and that by reason of some accidental ideas which are annexed to them, and make them offensive: and who is there that hath not observed some man to flag at the appearance, or in the company of some certain person not otherwise superior to him, but because having once on some occasion got the ascendant, the idea of authority and distance goes along with that of the person, and he that has been thus subjected, is not able to separate them?

§ 16. Instances of this kind are so plentiful everywhere, that if I add one more, it is only for the pleasant oddness of it. It is of a young gentleman, who having learnt to dance, and that to great perfection, there happened to stand an old trunk in the room

where he learnt. The idea of this remarkable piece of household stuff had so mixed itself with the turns and steps of all his dances, that though in that chamber he could dance excellently well, yet it was only whilst that trunk was there; nor could he perform well in any other place, unless that or some such other trunk had its due position in the room. If this story shall be suspected to be dressed up with some comical circumstances a little beyond precise nature; I answer for myself that I had it some years since from a very sober and worthy man, upon his own knowledge, as I report it: and I dare say, there are very few inquisitive persons, who read this, who have not met with accounts, if not examples of this nature, that may parallel, or at least justify this.

§ 17. Intellectual habits and defects this way contracted, are not less frequent and powerful, though less observed. Let the ideas of being and matter be strongly joined either by education or much thought, whilst these are still combined in the mind, what notions, what reasonings will there be about separate spirits? Let custom from the very childhood have joined figure and shape to the idea of God, and what absurdities will that mind be liable to about the Deity?

Its influence
on intellec-
tual habits.

Let the idea of infallibility be inseparably joined to any person, and these two constantly together possess the mind; and then one body, in two places at once, shall unexamined be swallowed for a certain truth by an implicit faith, whenever that imagined infallible person dictates and demands assent without inquiry.

§ 18. Some such wrong and unnatural combinations of ideas will be found to establish the irreconcilable opposition between different sects of philosophy and religion; for we cannot imagine every one of their followers to impose wilfully on himself, and knowingly refuse truth offered by plain reason. Interest, though it does a great deal in the case, yet cannot be thought to work whole societies of men to so universal a perverseness, as that every one of them to a man should knowingly main-

Observable
in different
sects.

tain falsehood'; some at least must be allowed to do what all pretend to, i. e. to pursue truth sincerely; and therefore there must be something that blinds their understandings, and makes them not see the falsehood of what they embrace for real truth. That which thus captivates their reasons, and leads men of sincerity blindfold from common sense, will, when examined, be found to be what we are speaking of: some independent ideas, of no alliance to one another, are by education, custom, and the constant din of their party, so coupled in their minds, that they always appear there together; and they can no more separate them in their thoughts, than if there were but one idea, and they operate as if they were so. This gives sense to jargon, demonstration to absurdities, and consistency to nonsense, and is the foundation of the greatest, I had almost said of all the errors in the world; or if it does not reach so far, it is at least the most dangerous one, since so far as it obtains, it hinders men from seeing and examining. When two things in themselves disjointed, appear to the sight constantly united; if the eye sees these things riveted, which are loose, where will you begin to rectify the mistakes that follow in two ideas, that they have been accustomed so to join in their minds, as to substitute one for the other, and, as I am apt to think, often without perceiving it themselves? This, whilst they are under the deccit of it, makes them incapable of conviction, and they applaud themselves as zealous champions for truth, when indeed they are contending for error; and the confusion of two different ideas, which a customary connexion of them in their minds hath to them made in effect but one, fills their heads with false views, and their reasonings with false consequences.

§ 19. Having thus given an account of Conclusion. the original, sorts, and extent of our ideas, with several other considerations, about these (I know not whether I may say) instruments or materials of our knowledge; the method I at first proposed to myself would now require, that I should immediately proceed to show what use the understanding makes of them, and what knowledge we have by them. This was that

which, in the first general view I had of this subject, was all that I thought I should have to do : but, upon a nearer approach, I find that there is so close a connexion between ideas and words ; and our abstract ideas, and general words, have so constant a relation one to another, that it is impossible to speak clearly and distinctly of our knowledge, which all consists in propositions, without considering, first the nature, use, and signification of language ; which therefore must be the business of the next book.

B O O K III.

CHAP. I.

Of Words or Language in general.

§ 1. GOD having designed man for a sociable creature, made him not only with an inclination, and under a necessity to have fellowship with those of his own kind ; but furnished him also with language, which was to be the great instrument and common tie of society. Man therefore had by nature his organs so fashioned, as to be fit to frame articulate sounds, which we call words. But this was not enough to produce language ; for parrots, and several other birds, will be taught to make articulate sounds distinct enough, which yet, by no means, are capable of language.

Man fitted to form articulate sounds.

§ 2. Besides articulate sounds therefore, it was farther necessary, that he should be able to use these sounds as signs of internal conceptions ; and to make them stand as marks for the ideas within his own mind, whereby they might be made known to others, and the thoughts of men's minds be conveyed from one to another.

To make them signs of ideas.

§ 3. But neither was this sufficient to make words so useful as they ought to be.

To make general signs,

Is it not enough for the perfection of language, that sounds can be made signs of ideas, unless those signs can be so made use of as to comprehend several particular things; for the multiplication of words would have perplexed their use, had every particular thing need of a distinct name to be signified by. To remedy this inconvenience, language had yet a farther improvement in the use of general terms, whereby one word was made to mark a multitude of particular existences: which advantageous use of sounds was obtained only by the difference of the ideas they were made signs of: those names becoming general, which are made to stand for general ideas, and those remaining particular, where the ideas they are used for are particular.

§ 4. Besides these names which stand for ideas, there be other words which men make use of, not to signify any idea, but the want or absence of some ideas simple or complex, or all ideas together; such as are nihil in Latin, and in English, ignorance and barrenness. All which negative or privative words cannot be said properly to belong to, or signify no ideas; for then they would be perfectly insignificant sounds; but they relate to positive ideas, and signify their absence.

§ 5. It may also lead us a little towards the original of all our notions and knowledge, if we remark how great a dependence our words have on common sensible ideas; and how those, which are made use of to stand for actions and notions quite removed from sense, have their rise from thence, and from obvious sensible ideas are transferred to more abstruse significations; and made to stand for ideas that come not under the cognizance of our senses: v. g. to imagine, apprehend, comprehend, adhere, conceive, instil, disgust, disturbance, tranquillity, &c. are all words taken from the operations of sensible things, and applied to certain modes of thinking. Spirit, in its primary signification, is breath: angel a messenger: and I doubt not, but if we could trace them to their sources, we should find, in all languages, the names, which stand for things that fall not under our senses, to have

Words ultimately derived from such as signify sensible ideas.

had their first rise from sensible ideas. For which we may give some kind of guess what kind of notions they were, and whence derived, which filled their minds who were the first beginners of languages: and how nature, even in the naming of things, unawares suggested to men the originals and principles of all their knowledge: whilst, to give names that might make known to others any operations they felt in themselves, or any other ideas that came not under their senses, they were fain to borrow words from ordinary known ideas of sensation, by that means to make others the more easily to conceive those operations they experimented in themselves which made no outward sensible appearances; and then when they had got known and agreed names, to signify those internal operations of their own minds, they were sufficiently furnished to make known by words all their other ideas; since they could consist of nothing, but either of outward sensible perceptions, or of the inward operations of their minds about them: we having, as has been proved, no ideas at all, but what originally come either from sensible objects without, or what we feel within ourselves, from the inward workings of our own spirits, of which we are conscious to ourselves within.

§ 6. But to understand better the use Distribution. and force of language, as subservient to instruction and knowledge, it will be convenient to consider,

First, To what it is that names, in the use of language, are immediately applied.

Secondly, Since all (except proper) names are general, and so stand not particularly for this or that single thing, but for sorts and ranks of things; it will be necessary to consider, in the next place, what the sorts and kinds, or, if you rather like the Latin names, what the species and genera of things are; wherein they consist, and how they come to be made. These being (as they ought) well looked into, we shall the better come to find the right use of words, the natural advantages and defects of language, and the remedies that ought to be used, to avoid the inconveniencies of

obscurity or uncertainty in the signification of words, without which it is impossible to discourse with any clearness, or order, concerning knowledge: which being conversant about propositions, and those most commonly universal ones, has greater connexion with words than perhaps is suspected.

These considerations therefore shall be the matter of the following chapters.

CHAP. II.

Of the Signification of Words.

Words are sensible signs necessary for communication. § 1. MAN, though he has great variety of thoughts, and such, from which others, as well as himself, might receive profit and delight; yet they are all within his own breast, invisible and hidden from others, nor can of themselves be made appear. The comfort and advantage of society not being to be had without communication of thoughts, it was necessary that man should find out some external sensible signs, whereof those invisible ideas, which his thoughts are made up for, might be made known to others. For this purpose nothing was so fit, either for plenty or quickness, as those articulate sounds, which with so much ease and variety he found himself able to make. Thus we may conceive how words which were by nature so well adapted to that purpose, come to be made use of by men, as the signs of their ideas; not by any natural connexion that there is between particular articulate sounds and certain ideas, for then there would be but one language amongst all men; but by a voluntary imposition, whereby such a word is made arbitrarily the mark of such an idea. The use then of words is to be sensible marks of ideas; and the ideas they stand for are their proper and immediate signification.

§ 2. The use men have of these marks being either to record their own thoughts for the assistance of their own memory, or as it were to bring out their ideas, and lay them before the view of others; words in their primary or immediate signification stand for nothing but the ideas in the mind of him that uses them, how imperfectly soever or carelessly those ideas are collected from the things which they are supposed to represent. When a man speaks to another, it is that he may be understood; and the end of speech is, that those sounds, as marks, may make known his ideas to the hearer. That then which words are the marks of are the ideas of the speaker: nor can any one apply them as marks, immediately to any thing else, but the ideas that he himself hath. For this would be to make them signs of his own conceptions, and yet apply them to other ideas; which would be to make them signs, and not signs, of his ideas at the same time; and so in effect to have no signification at all. Words being voluntary signs, they cannot be voluntary signs imposed by him on things he knows not. That would be to make them signs of nothing, sounds without signification. A man cannot make his words the signs either of qualities in things, or of conceptions in the mind of another, whereof he has none in his own. Till he has some ideas of his own, he cannot suppose them to correspond with the conceptions of another man; nor can he use any signs for them: for thus they would be the signs of he knows not what, which is in truth to be the signs of nothing. But when he represents to himself other men's ideas by some of his own, if he consent to give them the same names that other men do, it is still to his own ideas; to ideas that he has, and not to ideas that he has not.

Words are the sensible signs of his ideas who uses them.

§ 3. This is so necessary in the use of language, that in this respect the knowing and the ignorant, the learned and unlearned, use the words they speak (with any meaning) all alike. They, in every man's mouth, stand for the ideas he has, and which he would express by them. A child having taken notice of nothing in

the metal he hears called gold, but the bright shining yellow colour, he applies the word gold only to his own idea of that colour, and nothing else; and therefore calls the same colour in a peacock's tail gold. Another that hath better observed, adds to shining yellow great weight: and then the sound gold when he uses it, stands for a complex idea of a shining yellow and very weighty substance. Another adds to those qualities fusibility; and then the word gold signifies to him a body, bright, yellow, fusible, and very heavy. Another adds malleability. Each of these uses equally the word gold when they have occasion to express the idea which they have applied it to: but it is evident, that each can apply it only to his own idea; nor can he make it stand as a sign of such a complex idea as he has not.

Words often secretly referred first to the ideas in other men's minds. § 4. But though words as they are used by men, can properly and immediately signify nothing but the ideas that are in the mind of the speaker; yet they in their thoughts give them a secret reference to two other things.

First, They suppose their words to be marks of the ideas in the minds also of other men, with whom they communicate: for else they should talk in vain, and could not be understood, if the sounds they applied to one idea were such as by the hearer were applied to another: which is to speak two languages. But in this, men stand not usually to examine, whether the idea they and those they discourse with have in their minds, be the same; but think it enough that they use the word, as they imagine, in the common acceptation of that language; in which they suppose, that the idea they make it a sign of is precisely the same, to which the understanding men of that country apply that name.

Secondly, to the reality of things. § 5. Secondly, Because men would not be thought to talk barely of their own imaginations, but of things as really they are; therefore they often suppose the words to stand also for the reality of things. But this relating more

particularly to substances, and their names, as perhaps the former does to simple ideas and modes, we shall speak of these two different ways of applying words more at large, when we come to treat of the names of fixed modes, and substances in particular: though give me leave here to say, that it is a perverting the use of words, and brings unavoidable obscurity and confusion into their signification, whenever we make them stand for any thing, but those ideas we have in our own minds.

§ 6. Concerning words also it is farther to be considered: first, that they being immediately the signs of men's ideas, and by that means the instruments whereby men communicate their conceptions, and express to one another those thoughts and imaginations they have within their own breasts; there comes by constant use to be such a connexion between certain sounds and the ideas they stand for, that the names heard, almost as readily excite certain ideas, as if the objects themselves, which are apt to produce them, did actually affect the senses. Which is manifestly so in all obvious sensible qualities; and in all substances, that frequently and familiarly occur to us.

Words by
use readily
excite ideas.

§ 7. Secondly, That though the proper and immediate signification of words are ideas in the mind of the speaker, yet because by familiar use from our cradles we come to learn certain articulate sounds very perfectly, and have them readily on our tongues, and always at hand in our memories, but yet are not always careful to examine, or settle their significations perfectly; it often happens that men, even when they would apply themselves to an attentive consideration, do set their thoughts more on words than things. Nay, because words are many of them learned before the ideas are known for which they stand; therefore some, not only children, but men, speak several words no otherwise than parrots do, only because they have learned them, and have been accustomed to those sounds. But so far as words are of use and signification, so far is there a constant con-

Words often
used without
significa-
tion.

nexion between the sound and the idea, and a designation that the one stands for the other; without which application of them, they are nothing but so much insignificant noise.

§ 8. Words by long and familiar use, as Their signification perfectly arbitrary. has been said, come to excite in men certain ideas so constantly and readily, that they are apt to suppose a natural connexion between them. But that they signify only men's peculiar ideas, and that by a perfect arbitrary imposition, is evident in that they often fail to excite in others (even that use the same language) the same ideas we take them to be the signs of: and every man has so inviolable a liberty to make words stand for what ideas he pleases, that no one hath the power to make others have the same ideas in their minds that he has, when they use the same words that he does. And therefore the great Augustus himself, in the possession of that power which ruled the world, acknowledged he could not make a new Latin word: which was as much as to say, that he could not arbitrarily appoint what idea any sound should be a sign of, in the mouths and common language of his subjects. It is true, common use by a tacit consent appropriates certain sounds to certain ideas in all languages, which so far limits the signification of that sound, that unless a man applies it to the same idea, he does not speak properly: and let me add, that unless a man's words excite the same ideas in the hearer, which he makes them stand for in speaking, he does not speak intelligibly. But whatever be the consequence of any man's using of words differently, either from their general meaning, or the particular sense of the person to whom he addresses them, this is certain, their signification, in his use of them, is limited to his ideas, and they can be signs of nothing else.

CHAP. III.

Of General Terms.

§ 1. ALL things that exist being particular, it may perhaps be thought reasonable that words, which ought to be conformed to things, should be so too; I mean in their signification: but yet we find the quite contrary. The far greatest part of words, that make all languages, are general terms; which has not been the effect of neglect or chance, but of reason and necessity.

§ 2. First, It is impossible that every particular thing should have a distinct peculiar name. For the signification and use of words, depending on that connexion which the mind makes between its ideas and the sounds it uses as signs of them, it is necessary, in the application of names to things that the mind should have distinct ideas of the things, and retain also the particular name that belongs to every one, with its peculiar appropriation to that idea. But it is beyond the power of human capacity to frame and retain distinct ideas of all the particular things we meet with: every bird and beast men saw, every tree and plant that affected the senses, could not find a place in the most capacious understanding. If it be looked on as an instance of a prodigious memory, that some generals have been able to call every soldier in their army by his proper name, we may easily find a reason, why men have never attempted to give names to each sheep in their flock, or crow that flies over their heads; much less to call every leaf of plants, or grain of sand that came in their way, by a peculiar name.

§ 3. Secondly, If it were possible, it would yet be useless; because it would not serve to the chief end of language. Men would in vain heap up names of particular things, that would not

serve them to communicate their thoughts. Men learn names, and use them in talk with others, only that they may be understood: which is then only done, when by use or consent the sound I make by the organs of speech, excites in an other man's mind, who hears it, the idea I apply it to in mine, when I speak it. This cannot be done by names applied to particular things, whereof I alone having the ideas in my mind, the names of them could not be significant or intelligible to another, who was not acquainted with all those very particular things which had fallen under my notice.

§ 4. Thirdly, But yet granting this also feasible (which I think is not) yet a distinct name for every particular thing would not be of any great use for the improvement of knowledge: which, though founded in particular things, enlarges itself by general views: to which things reduced into sorts under general names, are properly subservient. These, with the names belonging to them, come within some compass, and do not multiply every moment, beyond what either the mind can contain, or use requires: and therefore, in these, men have for the most part stopped; but yet not so as to hinder themselves from distinguishing particular things, by appropriated names, where convenience demands it. And therefore in their own species, which they have most to do with, and wherein they have often occasion to mention particular persons, they make use of proper names; and there distinct individuals have distinct denominations.

What things have proper names. § 5. Besides persons, countries also, cities, rivers, mountains, and other the like distinctions of place, have usually found peculiar names, and that for the same reason; they being such as men have often an occasion to mark particularly, and as it were set before others in their discourses with them. And I doubt not, but if we had reason to mention particular horses, as often as we have to mention particular men, we should have proper names for the one, as familiar as for the other; and Bucephalus would be a word as much in use, as

Alexander. And therefore we see that, amongst jockeys, horses have their proper names to be known and distinguished by, as commonly as their servants; because, amongst them, there is often occasion to mention this or that particular horse, when he is out of sight.

§ 6. The next thing to be considered, is, how general words come to be made. How general words are made. For since all things that exist are only particulars, how come we by general terms.

or where find we those general natures they are supposed to stand for? Words become general, by being made the signs of general ideas; and ideas become general, by separating from them the circumstances of time, and place, and any other ideas, that may determine them to this or that particular existence. By this way of abstraction they are made capable of representing more individuals than one; each of which having in it a conformity to that abstract idea, is (as we call it) of that sort.

§ 7. But to deduce this a little more distinctly, it will not perhaps be amiss to trace our notions and names from their beginning, and observe by what degrees we proceed, and by what steps we enlarge our ideas from our first infancy. There is nothing more evident than that the ideas of the persons children converse with (to instance in them alone) are like the persons themselves, only particular. The ideas of the nurse, and the mother, are well framed in their minds; and, like pictures of them there, represent only those individuals. The names they first gave to them are confined to these individuals; and the names of nurse and mamma the child uses, determine themselves to those persons. Afterwards, when time and a larger acquaintance have made them observe, that there are a great many other things in the world that in some common agreements of shape, and several other qualities, resemble their father and mother, and those persons they have been used to, they frame an idea, which they find those many particulars do partake in; and to that they give, with others, the name man for ex-

ample. And thus they come to have a general name, and a general idea. Wherein they make nothing new, but only leave out of the complex idea they had of Peter and James, Mary and Jane, that which is peculiar to each, and retain only what is common to them all.

§ 8. By the same way that they come by the general name and idea of man, they easily advance to more general names and notions. For observing that several things that differ from their idea of man, and cannot therefore be comprehended under that name, have yet certain qualities wherein they agree with man, by retaining only those qualities, and uniting them into one idea, they have again another and more general idea; to which having given a name, they make a term of a more comprehensive extension: which new idea is made, not by any new addition, but only, as before, by leaving out the shape, and some other properties signified by the name man, and retaining only a body, with life, sense, and spontaneous motion, comprehended under the name animal.

General na- § 9. That this is the way whereby men
tures are no- first formed general ideas, and general
thing but ab- names to them, I think, is so evident, that
stract ideas. there needs no other proof of it, but the
considering of a man's self, or others, and the ordinary proceedings of their minds in knowledge: and he that thinks general natures or notions are any thing else but such abstract and partial ideas of more complex ones, taken at first from particular existences, will, I fear, be at a loss where to find them. For let any one reflect, and then tell me, wherein does his idea of man differ from that of Peter and Paul, or his idea of horse from that of Bucephalus, but in the leaving out something that is peculiar to each individual, and retaining so much of those particular complex ideas of several particular existences, as they are found to agree in? Of the complex ideas signified by the names man and horse, leaving out but those particulars wherein they differ, and retaining only those wherein they agree, and of those making a new distinct complex

idea, and giving the name animal to it; one has a more general term, that comprehends with man several other creatures. Leave out of the idea of animal, sense and spontaneous motion; and the remaining complex idea, made up of the remaining simple ones of body, life, and nourishment, becomes a more general one, under the more comprehensive term vivens. And not to dwell longer upon this particular, so evident in itself, by the same way the mind proceeds to body, substance, and at last to being, thing, and such universal terms which stand for any of our ideas whatsoever. To conclude, this whole mystery of genera and species, which make such a noise in the schools, and are with justice so little regarded out of them, is nothing else but abstract ideas, more or less comprehensive, with names annexed to them. In all which this is constant and unvariable, that every more general term stands for such an idea, and is but a part of any of those contained under it.

§ 10. This may show us the reason, why, in the defining of words, which is nothing but declaring their significations, we make use of the genus, or next general word that comprehends it. Which is not out of necessity, but only to save the labour of enumerating the several simple ideas, which the next general word or genus stands for; or, perhaps, sometimes the shame of not being able to do it. But though defining by genus and differentia (I crave leave to use these terms of art, though originally Latin, since they most properly suit those notions they are applied to) I say, though defining by the genus be the shortest way, yet I think it may be doubted whether it be the best. This I am sure, it is not the only, and so not absolutely necessary. For definition being nothing but making another understand by words what idea the term defined stands for, a definition is best made by enumerating those simple ideas that are combined in the signification of the term defined; and if instead of such an enumeration, men have accustomed themselves to use the next general term; it has not been out of necessity, or for

Why the genus is ordinarily made use of in definitions.

greater clearness, but for quickness and dispatch sake. For, I think, that to one who desired to know what idea the word man stood for, if it should be said, that man was a solid extended substance, having life, sense, spontaneous motion, and the faculty of reasoning: I doubt not but the meaning of the term man would be as well understood, and the idea it stands for be at least as clearly made known, as when it is defined to be a rational animal; which by the several definitions of animal, vivens, and corpus, resolves itself into those enumerated ideas. I have, in explaining the term man, followed here the ordinary definition of the schools: which though, perhaps, not the most exact, yet serves well enough to my present purpose. And one may, in this instance, see what gave occasion to the rule, that a definition must consist of genus and differentia; and it suffices to show us the little necessity there is of such a rule, or advantage in the strict observing of it. For definitions, as has been said, being only the explaining of one word by several others, so that the meaning or idea it stands for may be certainly known; languages are not always so made according to the rules of logic, that every term can have its signification exactly and clearly expressed by two others. Experience sufficiently satisfies us to the contrary: or else those who have made this rule have done ill, that they have given us so few definitions conformable to it. But of definitions more in the next chapter.

General and universal are plain by what has been said, that general creatures of the understanding. and universal belong not to the real existence of things; but are the inventions and creatures of the understanding, made by it for its own use, and concern only signs, whether words or ideas. Words are general, as has been said, when used for signs of general ideas, and so are applicable indifferently to many particular things: and ideas are general, when they are set up as the representatives of many particular things: but universality belongs not to things themselves, which are all of them particular in their existence; even those words and ideas, which in

their signification are general. When therefore we quit particulars, the generals that rest are only creatures of our own making; their general nature being nothing but the capacity they are put into by the understanding, of signifying or representing many particulars. For the signification they have is nothing but a relation, that by the mind of man is added to them.^a

^a Against this the bishop of Worcester objects, and our author * answers as followeth: 'however, saith the bishop, the abstracted ideas are the work of the mind, yet they are not mere creatures of the mind; as appears by an instance produced of the essence of the sun being in one single individual; in which case it is granted, That the idea may be so abstracted, that more suns might agree in it, and it is as much a sort, as if there were as many suns as there are stars. So that here we have a real essence subsisting in one individual, but capable of being multiplied into more, and the same essence remaining. But in this one sun there is a real essence, and not a mere nominal, or abstracted essence: but suppose there were more suns; would not each of them have the real essence of the sun? For what is it makes the second sun, but having the same real essence with the first? If it were but a nominal essence, then the second would have nothing but the name.'

This, as I understand, replies Mr. Locke, is to prove that the abstract general essence of any sort of things, or things of the same denomination, v. g. of man or marigold, hath a real being out of the understanding? which, I confess, I am not able to conceive. Your lordship's proof here brought out of my essay, concerning the sun, I humbly conceive, will not reach it; because what is said there, does not at all concern the real but nominal essence, as is evident from hence, that the idea I speak of there, is a complex idea; but we have no complex idea of the internal constitution or real essence of the sun. Besides, I say expressly, That our distinguishing substances into species, by names, is not at all founded on their real essences. So that the sun being one of these substances, I cannot, in the place quoted by your lordship, be supposed to mean by essence of the sun, the real essence of the sun, unless I had so expressed it. But all this argument will be at an end, when your lordship shall have explained what you mean by these words, 'true sun.' In my sense of them, any thing will be a true sun to which the name sun may be truly and properly applied, and to that substance or thing the name sun may be truly and properly applied, which has united in it that combination of sensible qualities, by which any thing else, that is called sun, is distinguished from other substances, i. e. by the nominal essence; and thus our sun is denominated and distinguished from a fixed star, not by a real essence that we do not know (for if we did, it is possible we should find the real essence or constitution of one of the fixed stars to be the same with that

* In his first letter.

Abstract
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and species.

§ 12. The next thing therefore to be considered, is, what kind of signification it is, that general words have. For as it is evident, that they do not signify barely one particular thing; for then they would not be general terms, but proper names; so on the other side it is as evident, they do not signify a plurality;

of our sun) but by a complex idea of sensible qualities co-existing, which, wherever they are found, make a true sun. And thus I crave leave to answer your lordship's question: 'for what is it makes the second sun to be a true sun, but having the same real essence with the first? If it were but a nominal essence, then the second would have nothing but the name.'

I humbly conceive, if it had the nominal essence, it would have something besides the name, viz. That nominal essence, which is sufficient to denominate it truly a sun, or to make it be a true sun, though we know nothing of that real essence whereon that nominal one depends. Your lordship will then argue, that that real essence is in the second sun, and makes the second sun. I grant it, when the second sun comes to exist, so as to be perceived by us to have all the ideas contained in our complex idea, i. e. in our nominal essence of a sun. For should it be true, (as is now believed by astronomers) that the real essence of the sun were in any of the fixed stars, yet such a star could not for that be by us called a sun, whilst it answers not our complex idea, or nominal essence of a sun. But how far that will prove, that the essences of things, as they are knowable by us, have a reality in them distinct from that of abstract ideas in the mind, which are merely creatures of the mind, I do not see; and we shall farther inquire, in considering your lordship's following words. 'Therefore, say you, there must be a real essence in every individual of the same kind.' Yes, and I beg leave of your lordship to say, of a different kind too. For that alone is it which makes it to be what it is.

That every individual substance has real, internal, individual constitution, i. e. a real essence, that makes it to be what it is, I readily grant. Upon this your lordship says, 'Peter, James, and John, are all true and real men.' Ans. Without doubt, supposing them to be men, they are true and real men, i. e. supposing the name of that species belongs to them. And so three bobagues are all true and real bobagues, supposing the name of that species of animals belongs to them.

For I beseech your lordship to consider, whether in your way of arguing, by naming them, Peter, James, and John, names familiar to us, as appropriated to individuals of the species man, your lordship does not first suppose them men, and then very safely ask, whether they be not all true and real men? But if I should ask your lordship, whether Weweena, Chuckery, and Cougheda, were true and real men or no? Your lordship would not be able to tell me, till, I having pointed out to your lordship the individuals called by those names, your lordship by

for man and men would then signify the same, and the distinction of numbers (as the grammarians call them) would be superfluous and useless. That then which general words signify is a sort of things; and each of them does that, by being a sign of an abstract idea in the mind, to which idea, as things existing are found to agree, so they come to be ranked under that name;

examining whether they had in them those sensible qualities which your lordship has combined into that complex idea to which you give the specific name man, determined them all, or some of them, to be the species which you call man, and so to be true and real man; which when your lordship has determined, it is plain you did it by that which is only the nominal essence, as not knowing the real one. But your lordship farther asks, 'What is it makes Peter, James, and John real men? Is it the attributing the general name to them? No, certainly; but that the true and real essence of a man is in every one of them.'

If, when your lordship asks, 'What makes them men?' your lordship used the word making in the proper sense for the efficient cause, and in that sense it were true, that the essence of a man, i. e. the specific essence of that species made a man; it would undoubtedly follow, that this specific essence had a reality beyond that of being only a general abstract idea in the mind. But when it is said, that it is the true and real essence of a man in every one of them that makes Peter, James, and John true and real men, the true and real meaning of these words is no more, but that the essence of that species, i. e. the properties answering the complex abstract idea to which the specific name is given, being found in them, that makes them be properly and truly called men, or is the reason why they are called men. Your lordship adds, 'and we must be as certain of this, as we are that they are men.'

How, I beseech your lordship, are we certain that they are men, but only by our senses, finding those properties in them which answer the abstract complex idea, which is in our minds, of the specific idea to which we have annexed the specific name man? This I take to be the true meaning of what your lordship says in the next words, viz. 'They take their denomination of being men from that common nature or essence which is in them;' and I am apt to think, these words will not hold true in any other sense.

Your lordship's fourth inference begins thus: 'That the general idea is not made from the simple ideas by the mere act of the mind abstracting from circumstances, but from reason and consideration of the nature of things.'

I thought, my lord, that reason and consideration had been acts of the mind, mere acts of the mind, when any thing was done by them. Your lordship gives a reason for it, viz. 'For, when we see several individuals that have the same powers and properties, we thence infer, that there must be something common to all, which makes them of one kind.'

or, which is all one, be of that sort.. Whereby it is evident, that the essences of the sorts, or (if the Latin word pleases better) species of things, are nothing else but these abstract ideas. For the having the essence of any species, being that which makes any thing to be of that species, and the conformity to the idea to which the name is annexed, being that which gives a right to that

I grant the inference to be true; but must beg leave to deny that this proves, that the general idea the name is annexed to, is not made by the mind. I have said, and it agrees with what your lordship here says, * That 'the mind, in making its complex ideas of substances, only follows nature, and puts no ideas together, which are not supposed to have an union in nature. Nobody joins the voice of a sheep with the shape of a horse; nor the colour of lead with the weight and fixedness of gold, to be the complex ideas of any real substances; unless he has a mind to fill his head with chimeras, and his discourses with unintelligible words. Men observing certain qualities always joined and existing together, therein copied nature, and of ideas so united, made their complex ones of substance, &c.' Which is very little different from what your lordship here says, that it is from our observation of individuals, that we come to infer, 'that there is something common to them all.' But I do not see how it will thence follow, that the general or specific idea is not made by the mere act of the mind. No, says your lordship, 'There is something common to them all, which makes them of one kind; and if the difference of kinds be real, that which makes them all of one kind must not be a nominal; but real essence.'

This may be some objection to the name of nominal essence; but is, as I humbly conceive, none to the thing designed by it. There is an internal constitution of things, on which their properties depend. This your lordship and I are agreed of, and this we call the real essence. There are also certain complex ideas, or combinations of these properties in men's minds, to which they commonly annex specific names, or names of sorts or kinds of things. This, I believe, your lordship does not deny. These complex ideas, for want of a better name, I have called nominal essences; how properly, I will not dispute. But if any one will help me to a better name for them, I am ready to receive it; till then, I must, to express myself, use this. Now, my lord, body, life, and the power of reasoning, being not the real essence of a man, as I believe your lordship will agree, will your lordship say, that they are not enough to make the thing wherein they are found, of the kind called man, and not of the kind called baboon, because the difference of these kinds is real? If this be not real enough to make the thing of one kind and not of another, I do not see how animal rationale can be enough really to distinguish a man from a horse; for that is but the nominal, not real essence of that kind, designed by the name man: and

* B. 3. C. 6. § 28, 29.

name; the having the essence, and the having that conformity, must needs be the same thing: since to be of any species, and to have a right to the name of that species, is all one. As for example, to be a man, or of the species man, and to have a right to the name man, is the same thing. Again, to be a man, or of the species man, and have the essence of a man, is the same thing.

yet I suppose, every one thinks it real enough to make a real difference between that and other kinds. And if nothing will serve the turn, to *MAKE* things of one kind and not of another (which, as I have showed, signifies no more but ranking of them under different specific names) but their real unknown constitutions, which are the real essences we are speaking of, I fear it would be a long while before we should have really different kinds of substances, or distinct names for them, unless we could distinguish them by these differences, of which we have no distinct conceptions. For I think it would not be readily answered me, if I should demand, wherein lies the real difference in the internal constitution of a stag from that of a buck, which are each of them very well known to be of one kind, and not of the other; and nobody questions but that the kinds, whercof each of them is, are really different.

Your lordship farther says, 'And this difference doth not depend upon the complex ideas of substances, whereby men arbitrarily join modes together in their minds.' I confess, my lord, I know not what to say to this, because I do not know what these complex ideas of substances are, whereby men arbitrarily join modes together in their minds. But I am apt to think there is a mistake in the matter, by the words that follow, which are these: 'For let them mistake in their complication of ideas, either in leaving out or putting in what doth not belong to them; and let their ideas be what they please, the real essence of a man, and a horse, and a tree, are just what they were.'

The mistake I spoke of, I humbly suppose, is this, that things are here taken to be distinguished by their real essences; when, by the very way of speaking of them, it is clear, that they are already distinguished by their nominal essences, and are so taken to be. For what, I beseech your lordship, does your lordship mean, when you say, 'The real essence of a man, and a horse, and a tree,' but that there are such kinds already set out by the signification of these names, man, horse, tree? And what, I beseech your lordship, is the signification of each of these specific names, but the complex idea it stands for? And that complex idea is the nominal essence, and nothing else. So that taking man, as your lordship does here, to stand for a kind or sort of individuals, all which agree in that common complex idea, which that specific name stands for, it is certain that the real essence of all the individuals comprehended under the specific name man, in your use of it, would be just the same; let others leave out or put into their complex idea of man what they please; because

Now since nothing can be a man, or have a right to the name man, but what has a conformity to the abstract idea the name man stands for ; nor any thing be a man, or have a right to the species man, but what has the essence of that species ; it follows, that the abstract idea for which the name stands, and the essence of the species, is one and the same. From whence it is easy to observe, that the essences of the sorts of things, and consequently the sorting of this, is the workmanship of the understanding, that abstracts and makes those general ideas.

the real essence on which that unaltered complex idea, i. e. those properties depend, must necessarily be concluded to be the same.

For I take it for granted, that in using the name man, in this place, your lordship uses it for that complex idea which is in your lordship's mind of that species. So that your lordship, by putting it for, or substituting it in the place of that complex idea where you say the real essence of it is just as it was, or the very same as it was, does suppose the idea it stands for to be steadily the same. For if I change the signification of the word man, whereby it may not comprehend just the same individuals which in your lordship's sense it does, but shut out some of those that to your lordship are men in your signification of the word man, or take in others to which your lordship does not allow the name man ; I do not think you will say, that the real essence of man in both these senses is the same. And yet your lordship seems to say so, when you say, ' Let men mistake in the complication ' of their ideas, either in leaving out or putting in what doth not ' belong to them ; ' and let their ideas be what they please, the real essence of the individuals comprehended under the names annexed to these ideas, will be the same : for so, I humbly conceive, it must be put, to make out what your lordship aims at. For as your lordship puts it by the name of man, or any other specific name, your lordship seems to me to suppose, that that name stands for, and not for the same idea, at the same time.

For example, my lord, let your lordship's idea, to which you annex the sign man, be a rational animal : let another man's idea be a rational animal of such a shape ; let a third man's idea be of an animal of such a size and shape, leaving out rationality ; let a fourth's be an animal with a body of such a shape, and an immaterial substance, with a power of reasoning ; let a fifth leave out of his idea an immaterial substance. It is plain every one of these will call his a man, as well as your lordship : and yet it is as plain that men, as standing for all these distinct, complex ideas, cannot be supposed to have the same internal constitution, i. e. the same real essence. The truth is, every distinct abstract idea with a name to it, makes a real distinct kind, whatever the real essence (which we know not of any of them) be.

§ 13, I would not here be thought to forget, much less to deny, that nature in the production of things makes several of them alike: there is nothing more obvious, especially in the races of animals, and all things propagated by seed. But yet, I think, we may say the sorting of them under names is the workmanship of the understanding, taking occasion from the similitude it observes amongst them to make abstract general ideas, and set them up in the mind, with names annexed to them as patterns or forms (for in that sense the word form has a very proper signification) to which as particular things existing are found to agree, so they come to be of that spe-

They are the workman-ship of the understanding, but have their foundation in the similitude of things.

And therefore I grant it true what your lordship says in the next words, 'And let the nominal essences differ never so much, the real 'common essence or nature of the several kinds, are not at all altered 'by them,' i. e. That our thoughts or ideas cannot alter the real constitutions that are in things that exist, there is nothing more certain. But yet it is true, that the change of ideas, to which we annex them, can and does alter the signification of their names, and thereby alter the kinds, which by these names we rank and sort them into. Your lordship farther adds, 'And these real essences are unchangeable,' i. e. the internal constitutions are unchangeable. Of what, I beseech your lordship, are the internal constitutions unchangeable? Not of any thing that exists, but of God alone; for they may be changed all as easily by that hand that made them, as the internal frame of a watch. What then is it that is unchangeable? The internal constitution, or real essence of a species; which, in plain English, is no more but this, whilst the same specific name, v. g. of man, horse, or tree, is annexed to, or made the sign of the same abstract complex idea, under which I rank several individuals; it is impossible but the real constitution on which that unaltered, complex idea, or nominal essence depends, must be the same, i. e. in other words, where we find all the same properties, we have reason to conclude there is the same real, internal constitution from which those properties flow.

But your lordship proves the real essences to be unchangeable, because God makes them, in these following words: 'For, however 'there may happen some variety in individuals by particular accidents, yet the essences of men, and horses, and trees, remain always 'the same; because they do not depend on the ideas of men, but on 'the will of the Creator, who hath made several sorts of beings.'

It is true, the real constitutions or essences of particular things existing do not depend on the ideas of men, but on the will of the Creator: but their being ranked into sorts, under such and such names, does depend, and wholly depend, on the ideas of men.

cies, have that denomination, or are put into that classis. For when we say, this is a man, that a horse ; this justice, that cruelty ; this a watch, that a jack ; what do we else but rank things under different specific names, as agreeing to those abstract ideas, of which we have made those names the signs ? And what are the essences of those species set out and marked by names, but those abstract ideas in the mind ; which are as it were the bonds between particular things that exist and the names they are to be ranked under ? And when general names have any connexion with particular beings, these abstract ideas are the medium that unites them : so that the essences of species, as distinguished and denominated by us, neither are nor can be any thing but these precise abstract ideas we have in our minds. And therefore the supposed real essences of substances, if different from our abstract ideas, cannot be the essences of the species we rank things into. For two species may be one as rationally, as two different essences be the essence of one species ; and I demand what are the alterations may or may not be in a horse or lead, without making either of them to be of another species ? In determining the species of things by our abstract ideas, this is easy to resolve : but if any one will regulate himself herein by supposed real essences, he will, I suppose, be at a loss ; and he will never be able to know when any thing precisely ceases to be of the species of a horse or lead.

Each distinct
abstract idea
is a distinct
essence.

§ 14. Nor will any one wonder, that I say these essences, or abstract ideas, (which are the measures of name, and the boundaries of species) are the workmanship of the

understanding, who considers, that at least the complex ones are often, in several men, different collections of simple ideas : and therefore that is covetousness to one man, which is not so to another. Nay, even in substances, where their abstract ideas seem to be taken from the things themselves, they are not constantly the same ; no not in that species which is most familiar to us, and with which we have the most intimate acquaintance : it having been more than once doubted, whether the foetus born of a woman were a man ; even so far, as that it

hath been debated, whether it were or were not to be nourished and baptized : which could not be, if the abstract idea or essence, to which the name man belonged, were of nature's making ; and were not the uncertain and various collection of simple ideas, which the understanding put together, and then abstracting it, affixed a name to it. So that in truth every distinct abstract idea is a distinct essence : and the names that stand for such distinct ideas are the names of things essentially different. Thus a circle is as essentially different from an oval, as a sheep from a goat : and rain is as essentially different from snow, as water from earth ; that abstract idea which is the essence of one being impossible to be communicated to the other. And thus any two abstract ideas, that in any part vary one from another, with two distinct names annexed to them, constitute two distinct sorts, or, if you please, species, as essentially different as any two of the most remote, or opposite in the world.

§ 15. But since the essences of things Real and are thought, by some, (and not without nominal reason) to be wholly unknown : it may not essence. be amiss to consider the several significations of the word essence.

First, essence may be taken for the being of any thing, whereby it is what it is. And thus the real internal, but generally, in substances, unknown constitution of things, whereon their discoverable qualities depend, may be called their essence. This is the proper original signification of the word, as is evident from the formation of it ; *essentia*, in its primary notation, signifying properly being. And in this sense it is still used, when we speak of the essence of particular things, without giving them any name.

Secondly, the learning and disputes of the schools having been much busied about genus and species, the word essence has almost lost its primary signification : and instead of the real constitution of things, has been almost wholly applied to the artificial constitution of genus and species. It is true, there is ordinarily supposed a real constitution of the sorts of things ; and it

is past doubt, there must be some real constitution, on which any collection of simple ideas co-existing must depend. But it being evident, that things are ranked under names into sorts or species, only as they agree to certain abstract ideas, to which we have annexed those names : the essence of each genus, or sort, comes to be nothing but that abstract idea, which the general, or sortal (if I may have leave so to call it from sort, as I do general from genus) name stands for. And this we shall find to be that which the word essence imports in its most familiar use. These two sorts of essences, I suppose, may not unfitly be termed, the one the real, the other nominal essence.

Constant
connexion
between the
name and
nominal es-
sence.

§ 16. Between the nominal essence and the name, there is so near a connexion, that the name of any sort of things cannot be attributed to any particular being but what has this essence, whereby it answers that abstract idea, whereof that name is the sign.

Supposition,
that species
are distin-
guished by
their real
essences,
useless.

§ 17. Concerning the real essences of corporeal substances, (to mention these only) there are, if I mistake not, two opinions. The one is of those, who using the word essence for they know not what, suppose a certain number of those essences, according to which all natural things are made, and wherein they do exactly every one of them partake, and so become of this or that species. The other, and more rational opinion, is of those who look on all natural things to have a real, but unknown constitution of their insensible parts; from which flow those sensible qualities, which serve us to distinguish them one from another, according as we have occasion to rank them into sorts under common denominations. The former of these opinions, which supposes these essences, as a certain number of forms or moulds, wherein all natural things, that exist, are cast, and do equally partake, has, I imagine, very much perplexed the knowledge of natural things. The frequent productions of monsters, in all the species of animals, and of changelings, and other

strange issues of human birth, carry with them difficulties, not possible to consist with this hypothesis: since it is as impossible, that two things, partaking exactly of the same real essence, should have different properties, as that two figures partaking of the same real essence of a circle should have different properties. But were there no other reason against it, yet the supposition of essences that cannot be known, and the making of them nevertheless to be that which distinguishes the species of things, is so wholly useless, and unserviceable to any part of our knowledge, that that alone were sufficient to make us lay it by, and content ourselves with such essences of the sorts or species of things as come within the reach of our knowledge: which, when seriously considered, will be found, as I have said, to be nothing else but those abstract complex ideas, to which we have annexed distinct general names.

§ 18. Essences being thus distinguished into nominal and real, we may farther observe, that in the species of simple ideas and modes, they are always the same; but in substances always quite different. Thus a figure including a space between three lines, is the real as well as nominal essence of a triangle; it being not only the abstract idea to which the general name is annexed, but the very *essentia* or being of the thing itself, that foundation from which all its properties flow, and to which they are all inseparably annexed. But it is far otherwise concerning that parcel of matter, which makes the ring on my finger, wherein these two essences are apparently different. For it is the real constitution of its insensible parts, on which depend all those properties of colour, weight, fusibility, fixedness, &c. which are to be found in it, which constitution we know not, and so having no particular idea of, have no name that is the sign of it. But yet it is its colour, weight, fusibility, fixedness, &c. which makes it to be gold, or gives it a right to that name, which is therefore its nominal essence: since nothing can be called gold but what has a conformity of quali-

Real and nominal essence the same in simple ideas and modes, different in substances.

ties to that abstract complex idea, to which that name is annexed. But this distinction of essences belonging particularly to substances, we shall, when we come to consider their names, have an occasion to treat of more fully.

§ 19. That such abstract ideas, with
 Essences in- names to them, as we have been speaking
 generable of, are essences, may farther appear by
 and incor- of, are essences, may farther appear by
 ruptible. what we are told concerning essences, viz.

that they are all ingenerable and incorruptible. Which cannot be true of the real constitutions of things which begin and perish with them. All things that exist, besides their author, are all liable to change; especially those things we are acquainted with, and have ranked into bands under distinct names or ensigns. Thus that which was grass to-day, is to-morrow the flesh of a sheep; and within a few days after becomes part of a man: in all which, and the like changes, it is evident their real essence, i. e. that constitution, whereon the properties of these several things depended, is destroyed and perishes with them. But essences being taken for ideas, established in the mind, with names annexed to them, they are supposed to remain steadily the same, whatever mutations the particular substances are liable to. For whatever becomes of Alexander and Bucephalus, the ideas to which man and horse are annexed, are supposed nevertheless to remain the same; and so the essences of those species are preserved whole and undestroyed, whatever changes happen to any, or all of the individuals of those species. By this means the essence of a species rests safe and entire, without the existence of so much as one individual of that kind. For were there now no circle existing any where in the world, (as perhaps that figure exists not any where exactly marked out) yet the idea annexed to that name would not cease to be what it is; nor cease to be as a pattern to determine which of the particular figures we meet with have or have not a right to the name circle, and so to show which of them by having that essence, was of that species. And though there neither were nor had been in nature such a beast as an unicorn, or

such a fish as a mermaid; yet supposing those names to stand for complex abstract ideas that contained no inconsistency in them, the essence of a mermaid is as intelligible as that of a man; and the idea of an unicorn as certain, steady, and permanent as that of a horse. From what has been said it is evident, that the doctrine of the immutability of essences proves them to be only abstract ideas; and is founded on the relation established between them, and certain sounds as signs of them; and will always be true as long as the same name can have the same signification.

§ 20. To conclude, this is that which in short I would say, viz. that all the great business of genera and species, and their essences, amounts to no more but this, That men making abstract ideas, and settling them in their minds with names annexed to them, do thereby enable themselves to consider things, and discourse of them as it were in bundles, for the easier and readier improvement and communication of their knowledge; which would advance but slowly, were their words and thoughts confined only to particulars.

Recapitulation.

CHAP. IV.

Of the Names of Simple Ideas.

§ 1. THOUGH all words, as I have shown, signify nothing immediately but the ideas in the mind of the speaker; yet upon a nearer survey we shall find that the names of simple ideas, mixed modes, (under which I comprise relations too) and natural substances, have each of them something peculiar and different from the other. For example :

Names of simple ideas, modes, and substances, have each something peculiar.

§ 2. First, The names of simple ideas and substances, with the abstract ideas in the mind, which they immediately signify,

1. Names of simple ideas and sub-

stances intimate also some real existence, from intimate real which was derived their original pattern. existence. But the names of mixed modes terminate in the idea that is in the mind, and lead not the thoughts any farther, as we shall see more at large in the following chapter.

§ 3. Secondly, The names of simple ideas and modes signify always the real as well as nominal essence of their species. But the names of natural substances signify rarely, if ever, any thing but barely the nominal essences of those species; as we shall show in the chapter that treats of the names of substances in particular.

§ 4. Thirdly, The names of simple ideas are not capable of any definition; the names of all complex ideas are. It has not, that I know, been yet observed by any body, what words are, and what are not capable of being defined; the want whereof is (as I am apt to think) not seldom the occasion of great wrangling and obscurity in men's discourses, whilst some demand definitions of terms that cannot be defined; and others think they ought not to rest satisfied in an explication made by a more general word, and its restriction, (or to speak in terms of art, by a genus and difference) when even after such definition made according to rule, those who hear it have often no more a clear conception of the meaning of the word than they had before. This at least I think, that the showing what words are, and what are not capable of definitions, and wherein consists a good definition, is not wholly besides our present purpose; and perhaps will afford so much light to the nature of these signs, and our ideas, as to deserve a more particular consideration.

§ 5. I will not here trouble myself to prove that all terms are not definable from that progress in infinitum, which it will visibly lead us into, if we should allow that all names could be defined. For if the terms of one definition were still to be defined by

another, where at last should we stop? But I shall from the nature of our ideas, and the signification of our words, show, why some names can, and others cannot be defined, and which they are.

§ 6. I think it is agreed, that a definition is nothing else but the showing the meaning of one word by several other not synonymous terms. The meaning of words being only the ideas they are made to stand for by him that uses them, the meaning of any term is then showed, or the word is defined, when by other words the idea it is made the sign of, and annexed to, in the mind of the speaker, is as it were represented, or set before the view of another; and thus its signification ascertained: this is the only use and end of definitions; and therefore the only measure of what is, or is not a good definition.

What a definition is.

§ 7. This being premised, I say, that the names of simple ideas, and those only are incapable of being defined. The reason whereof is this, that the several terms of a definition, signifying several ideas, they can all together by no means represent an idea, which has no composition at all: and therefore definition, which is properly nothing but the showing the meaning of one word by several others not signifying each the same thing, can in the names of simple ideas have no place.

Simple ideas why undefinable.

§ 8. The not observing this difference in our ideas, and their names, has produced that eminent trifling in the schools, which is so easy to be observed in the definitions they give us of some few of these simple ideas. For as to the greatest part of them, even those masters of definitions were fain to leave them untouched, merely by the impossibility they found in it. What more exquisite jargon could the wit of man invent, than this definition, "The act of a being in power, as far forth as in power?" which would puzzle any rational man, to whom it was not already known by its famous absurdity, to guess what word it could ever be supposed to be the explication of. If Tully, asking a Dutchman what "be-

Instances; motion.

“weeginge” was, should have received this explication in his own language, that it was “actus entis in potentia quatenus in potentia;” I ask whether any one can imagine he could thereby have understood what the word “beweeginge” signified, or have guessed what idea a Dutchman ordinarily had in his mind, and would signify to another, when he used that sound.

§ 9. Nor have the modern philosophers, who have endeavoured to throw off the jargon of the schools, and speak intelligibly, much better succeeded in defining simple ideas, whether by explaining their causes, or any otherwise. The atomists, who define motion to be a passage from one place to another, what do they more than put one synonymous word for another? For what is passage other than motion? And if they were asked what passage was, how would they better define it than by motion? For is it not at least as proper and significant to say, passage is a motion from one place to another, as to say, motion is a passage, &c.? This is to translate, and not to define, when we change two words of the same signification one for another; which, when one is better understood than the other, may serve to discover what idea the unknown stands for; but is very far from a definition, unless we will say every English word in the dictionary is the definition of the Latin word it answers, and that motion is a definition of motus. Nor will the successive application of the parts of the superficies of one body to those of another, which the Cartesians give us, prove a much better definition of motion, when well examined.

Light. § 10. “The act of perspicuous,” as far forth as perspicuous,” is another peripatetic definition of a simple idea; which though not more absurd than the former of motion, yet betrays its uselessness and insignificancy more plainly, because experience will easily convince any one, that it cannot make the meaning of the word light (which it pretends to define) at all understood by a blind man; but the definition of motion appears not at first sight so useless, because it escapes this way of trial. For this simple idea, entering by the touch as well as sight, it is impossible to show an example

of any one, who has no other way to get the idea of motion, but barely by the definition of that name. Those who tell us, that light is a great number of little globules, striking briskly on the bottom of the eye, speak more intelligibly than the schools; but yet these words ever so well understood would make the idea the word light stands for no more known to a man that understands it not before, than if one should tell him, that light was nothing but a company of little tennis-balls, which fairies all day long struck with rackets against some men's foreheads, whilst they passed by others. For granting this explication of the thing to be true; yet the idea of the cause of light, if we had it ever so exact, would no more give us the idea of light itself, as it is such a particular perception in us, than the idea of the figure and motion of a sharp piece of steel would give us the idea of that pain which it is able to cause in us. For the cause of any sensation, and the sensation itself, in all the simple ideas of one sense, are two ideas; and two ideas so different and distant one from another, that no two can be more so. And therefore should Des Cartes's globules strike ever so long on the retina of a man, who was blind by a gutta serena, he would thereby never have any idea of light, or any thing approaching it, though he understood what little globules were, and what striking on another body was, ever so well. And therefore the Cartesians very well distinguish between that light which is the cause of that sensation in us, and the idea which is produced in us by it, and is that which is properly light.

§ 11. Simple ideas, as has been shown, are only to be got by those impressions objects themselves make on our minds, by the proper inlets appointed to each sort. If they are not received this way, all the words in the world, made use of to explain or define any of their names, will never be able to produce in us the idea it stands for. For words being sounds can produce in us no other simple ideas, than of those very sounds; nor excite any in us, but by that voluntary

Simple ideas,
why unde-
finable, far-
ther explain-
ed.

connexion which is known to be between them and those simple ideas, which common use has made them signs of. He that thinks otherwise, let him try if any words can give him the taste of a pine-apple, and make him have the true idea of the relish of that celebrated delicious fruit. So far as he is told it has a resemblance with any tastes, whereof he has the ideas already in his memory, imprinted there by sensible objects not strangers to his palate, so far may he approach that resemblance in his mind. But this is not giving us that idea by a definition, but exciting in us other simple ideas by their known names; which will be still very different from the true taste of that fruit itself. In light and colours, and all other simple ideas, it is the same thing; for the signification of sounds is not natural, but only imposed and arbitrary. And no definition of light, or redness, is more fitted, or able to produce either of those ideas in us, than the sound light or red by itself. For to hope to produce an idea of light, or colour, by a sound, however formed, is to expect that sounds should be visible, or colours audible, and to make the ears do the office of all the other senses. Which is all one as to say, that we might taste, smell, and see by the ears; a sort of philosophy worthy only of Sancho Panca, who had the faculty to see Dulcinea by hearsay. And therefore he that has not before received into his mind, by the proper inlet, the simple idea which any word stands for, can never come to know the signification of that word by any other words or sounds whatsoever, put together according to any rules of definition. The only way is by applying to his senses the proper object, and so producing that idea in him, for which he has learned the name already. A studious blind man, who had mightily beat his head about visible objects, and made use of the explication of his books and friends, to understand those names of light and colours, which often came in his way, bragged one day, that he now understood what scarlet signified. Upon which his friend demanding, what scarlet was? the blind man answered, It was like the sound of a trumpet. Just such an under-

standing of the name of any other simple idea will he have, who hopes to get it only from a definition, or other words made use of to explain it.

§ 12. The case is quite otherwise in complex ideas; which consisting of several simple ones, it is in the power of words, standing for the several ideas that make that composition, to imprint complex ideas in the mind, which were never there before, and so make their names be understood.

The contrary showed in complex ideas, by instances of a statue and rainbow.

In such collections of ideas, passing under one name, definition, or the teaching the signification of one word by several others, has place, and may make us understand the names of things, which never came within the reach of our senses; and frame ideas suitable to those in other men's minds, when they use those names: provided that none of the terms of the definition stand for any such simple ideas, which he to whom the explanation is made has never yet had in his thought. Thus the word statue may be explained to a blind man by other words, when picture cannot; his senses having given him the idea of figure, but not of colours, which therefore words cannot excite in him. This gained the prize to the painter against the statuary: each of which contending for the excellency of his art, and the statuary bragging that his was to be preferred, because it reached farther, and even those who had lost their eyes could yet perceive the excellency of it, the painter agreed to refer himself to the judgment of a blind man; who being brought where there was a statue, made by the one, and a picture drawn by the other, he was first led to the statue, in which he traced with his hands all the lineaments of the face and body, and with great admiration applauded the skill of the workman. But being led to the picture, and having his hands laid upon it, was told, that now he touched the head, and then the forehead, eyes, nose, &c. as his hands moved over the parts of the picture on the cloth, without finding any the least distinction: whereupon he cried out, that certainly that must needs be a very admirable and divine piece of workmanship, which could repre-

sent to them all those parts, where he could neither feel nor perceive any thing.

§ 13. He that should use the word rainbow to one who knew all those colours, but yet had never seen that phænomenon, would, by enumerating the figure, largeness, position and order of the colours, so well define that word, that it might be perfectly understood. But yet that definition, how exact and perfect soever, would never make a blind man understand it; because several of the simple ideas that make that complex one, being such as he never received by sensation and experience, no words are able to excite them in his mind.

The same
of complex
ideas when
to be made
intelligible
by words.

§ 14. Simple ideas, as has been showed, can only be got by experience, from those objects, which are proper to produce in us those perceptions. When by this means we have our minds stored with them, and know the names for them, then we are in a condition to define, and by definition to understand the names of complex ideas, that are made up of them. But when any term stands for a simple idea, that a man has never yet had in his mind, it is impossible by any words to make known its meaning to him. When any term stands for an idea a man is acquainted with, but is ignorant that that term is the sign of it; there another name, of the same idea which he has been accustomed to, may make him understand its meaning. But in no case whatsoever is any name, of any simple idea, capable of a definition.

4. Names of
simple ideas
least doubtful.

§ 15. Fourthly, But though the names of simple ideas, have not the help of definition to determine their signification, yet that hinders not but that they are generally less doubtful and uncertain, than those of mixed modes and substances: because they standing only for one simple perception, men, for the most part, easily and perfectly agree in their signification, and there is little room for mistake and wrangling about their meaning. He that knows once that whiteness is the name of that colour he has observed in snow or milk, will not be

apt to misapply that word, as long as he retains that idea; which when he has quite lost, he is not apt to mistake the meaning of it, but perceives he understands it not. There is neither a multiplicity of simple ideas to be put together, which makes the doubtfulness in the names of mixed modes; nor a supposed, but an unknown real essence, with properties depending thereon, the precise number whereof is also unknown, which makes the difficulty in the names of substances. But on the contrary, in simple ideas the whole signification of the name is known at once, and consists not of parts, whereof more or less being put in, the idea may be varied, and so the signification of name be obscure or uncertain.

§ 16. Fifthly, This farther may be observed concerning simple ideas and their names, that they have but few ascents in lineâ prædicamentali (as they call it) from the lowest species to the summum genus.

5. Simple ideas have few ascents in lineâ prædicamentali.

The reason whereof is, that the lowest species being but one simple idea, nothing can be left out of it; that so the difference being taken away it may agree with some other thing in one idea common to them both; which, having one name, is the genus of the other two: v. g. there is nothing that can be left out of the idea of white and red, to make them agree in one common appearance, and so have one general name; as rationality being left out of the complex idea of man, makes it agree with brute, in the more general idea and name of animal: and therefore when to avoid unpleasant enumerations, men would comprehend both white and red, and several other such simple ideas, under one general name, they have been fain to do it by a word, which denotes only the way they get into the mind. For when white, red, and yellow, are all comprehended under the genus or name colour, it signifies no more but such ideas as are produced in the mind only by the sight, and have entrance only through the eyes. And when they would frame yet a more general term, to comprehend both colours and sounds, and the like simple ideas, they do it by a word that signifies all

such as come into the mind only by one sense : and so the general term quality, in its ordinary acceptation, comprehends colours, sounds, tastes, smells, and tangible qualities, with distinction from extension, number, motion, pleasure, and pain, which make impressions on the mind, and introduce their ideas by more senses than one.

6. Names of simple ideas § 17. Sixthly, The names of simple ideas, substances, and mixed modes have also this difference; that those of mixed modes stand not at all arbitrary. for ideas perfectly arbitrary; those of substances are not perfectly so, but refer to a pattern, though with some latitude; and those of simple ideas are perfectly taken from the existence of things, and are not arbitrary at all. Which, what difference it makes in the significations of their names, we shall see in the following chapters.

The names of simple modes differ little from those of simple ideas.

CHAP. V.

Of the Names of mixed Modes and Relations.

They stand for abstract ideas, as other general names. § 1. THE names of mixed modes being general, they stand, as has been shown, for sorts or species of things, each of which has its peculiar essence. The essences of these species also, as has been showed, are nothing but the abstract ideas in the mind, to which the name is annexed. Thus far the names and essences of mixed modes have nothing but what is common to them with other ideas : but if we take a little nearer survey of them, we shall find that they have something peculiar, which perhaps may deserve our attention.

§ 2. The first particularity I shall observe in them, is, that the abstract ideas, or, if you please, the essences of the several species of mixed modes are made by the understanding, wherein they differ from those of simple ideas : in which sort the mind has no power to make any one, but only receives such as are presented to it, by the real existence of things, operating upon it.

1. The ideas they stand for are made by the understanding.

§ 3. In the next place, these essences of the species of mixed modes are not only made by the mind, but made very arbitrarily, made without patterns, or reference to any real existence. Wherein they differ from those of substances, which carry with them the supposition of some real being, from which they are taken, and to which they are conformable. But in its complex ideas of mixed modes, the mind takes a liberty not to follow the existence of things exactly. It unites and retains certain collections, as so many distinct specific ideas, whilst others, that as often occur in nature, and are as plainly suggested by outward things, pass neglected, without particular names or specifications. Nor does the mind, in these of mixed modes, as in the complex idea of substances, examine them by the real existence of things; or verify them by patterns, containing such peculiar compositions in nature. To know whether his idea of adultery or incest be right, will a man seek it any where amongst things existing? Or is it true, because any one has been witness to such an action? No : but it suffices here, that men have put together such a collection into one complex idea, that makes the archetype and specific idea, whether ever any such action were committed in *rerum natura* or no.

2. Made arbitrarily, and without patterns.

§ 4. To understand this right, we must consider wherein this making of these complex ideas consists; and that is not in the making any new idea, but putting together those which the mind had before. Wherein the mind does these three things : first, it chooses a certain number : secondly, it gives them connexion, and makes them into one idea : thirdly, it ties them together by a name. If we examine

How this is done.

how the mind proceeds in these, and what liberty it takes in them, we shall easily observe how these essences of the species of mixed modes are the workmanship of the mind; and consequently, that the species themselves are of men's making.

Evidently
arbitrary, in
that the idea
is often be-
fore the ex-
istence.

§ 5. No body can doubt but that these ideas of mixed modes are made by a voluntary collection of ideas put together in the mind, independent from any original patterns in nature, who will but reflect that this sort of complex ideas may be made, abstracted, and have names given them, and so a species be constituted, before any one individual of that species ever existed. Who can doubt but the ideas of sacrilege or adultery might be framed in the minds of men, and have names given them; and so these species of mixed modes be constituted, before either of them was ever committed; and might be as well discoursed of and reasoned about, and as certain truths discovered of them, whilst yet they had no being but in the understanding, as well as now, that they have but too frequently a real existence? Whereby it is plain, how much the sorts of mixed modes are the creatures of the understanding, where they have a being as subservient to all the ends of real truth and knowledge, as when they really exist: and we cannot doubt but law-makers have often made laws about species of actions, which were only the creatures of their own understandings; beings that had no other existence but in their own minds. And I think nobody can deny, but that the resurrection was a species of mixed modes in the mind, before it really existed.

Instances;
murder, in-
cest, stab-
bing.

§ 6. To see how arbitrarily these essences of mixed modes are made by the mind, we need but take a view of almost any of them.

A little looking into them will satisfy us, that it is the mind that combines several scattered independent ideas into one complex one, and, by the common name it gives them, makes them the essence of a certain species, without regulating itself by any connexion they have in nature. For what greater

connexion in nature has the idea of a man, than the idea of a sheep, with killing; that this is made a particular species of action, signified by the word murder, and the other not? Or what union is there in nature between the idea of the relation of a father with killing, than that of a son, or neighbour; that those are combined into one complex idea, and thereby made the essence of the distinct species parricide, whilst the other make no distinct species at all? But though they have made killing a man's father, or mother, a distinct species from killing his son, or daughter; yet in some other cases, son and daughter are taken in too, as well as father and mother: and they are all equally comprehended in the same species, as in that of incest. Thus the mind in mixed modes arbitrarily unites into complex ideas such as it finds convenient; whilst others that have altogether as much union in nature, are left loose, and never combined into one idea, because they have no need of one name. It is evident then, that the mind by its free choice gives a connexion to a certain number of ideas, which in nature have no more union with one another, than others that it leaves out: why else is the part of the weapon, the beginning of the wound is made with, taken notice of to make the distinct species called stabbing, and the figure and matter of the weapon left out? I do not say, this is done without reason, as we shall see more by and by; but this I say, that it is done by the free choice of the mind, pursuing its own ends; and that therefore these species of mixed modes are the workmanship of the understanding: and there is nothing more evident, than that, for the most part, in the framing these ideas the mind searches not its patterns in nature, nor refers the ideas it makes to the real existence of things; but puts such together, as may best serve its own purposes, without tying itself to a precise imitation of any thing that really exists.

§ 7. But though these complex ideas, But still subservient to the end of language. or essences of mixed modes, depend on the mind, and are made by it with great liberty; yet they are not made at random, and jumbled together without any reason at all. Though

these complex ideas be not always copied from nature, yet they are always suited to the end for which abstract ideas are made: and though they be combinations made of ideas that are loose enough, and have as little union in themselves, as several other to which the mind never gives a connexion that combines them into one idea; yet they are always made for the convenience of communication, which is the chief end of language. The use of language is by short sounds to signify with ease and dispatch general conceptions: wherein not only abundance of particulars may be contained, but also a great variety of independent ideas collected into one complex one. In the making therefore of the species of mixed modes, men have had regard only to such combinations as they had occasion to mention one to another. Those they have combined into distinct complex ideas, and given names to; whilst others, that in nature have as near an union, are left loose and unregarded. For to go no farther than human actions themselves, if they would make distinct abstract ideas of all the varieties might be observed in them, the number must be infinite, and the memory confounded with the plenty, as well as overcharged to little purpose. It suffices that men make and name so many complex ideas of these mixed modes, as they find they have occasion to have names for, in the ordinary occurrence of their affairs. If they join to the idea of killing the idea of father, or mother, and so make a distinct species from killing a man's son or neighbour, it is because of the different heinousness of the crime, and the distinct punishment is due to the murdering a man's father and mother, different from what ought to be inflicted on the murder of a son or neighbour; and therefore they find it necessary to mention it by a distinct name, which is the end of making that distinct combination. But though the ideas of mother and daughter are so differently treated, in reference to the idea of killing, that the one is joined with it, to make a distinct abstract idea with a name, and so a distinct species, and the other not; yet in respect of carnal knowledge, they are both taken in under incest: and

that still for the same convenience of expressing under one name, and reckoning of one species, such unclean mixtures as have a peculiar turpitude beyond others; and this to avoid circumlocutions and tedious descriptions.

§ 8. A moderate skill in different languages will easily satisfy one of the truth of this, it being so obvious to observe great store of words in one language, which have not any that answer them in another. Which plainly shows, that those of one country, by their customs and manner of life, have found occasion to make several complex ideas, and given names to them, which others never collected into specific ideas. This could not have happened, if these species were the steady workmanship of nature, and not collections made and abstracted by the mind, in order to naming, and for the convenience of communication. The terms of our law, which are not empty sounds, will hardly find words that answer them in the Spanish or Italian, no scanty languages; much less, I think, could any one translate them into the Caribbee or Westoe tongues: and the Versura of the Romans, or Corban of the Jews, have no words in other languages to answer them: the reason whereof is plain, from what has been said. Nay, if we look a little more nearly into this matter, and exactly compare different languages, we shall find, that though they have words which in translations and dictionaries are supposed to answer one another, yet there is scarce one of ten amongst the names of complex ideas, especially of mixed modes, that stands for the same precise idea, which the word does that in dictionaries it is rendered by. There are no ideas more common, and less compounded, than the measures of time, extension, and weight, and the Latin names, *hora*, *pes*, *libra*, are without difficulty rendered by the English names, *hour*, *foot*, and *pound*: but yet there is nothing more evident, than that the ideas a Roman annexed to these Latin names, were very far different from those which an Englishman expresses by those English ones. And if either of these should make use of the measures that those of

Whereof the intranslatable words of divers languages are a proof.

the other language designed by their names, he would be quite out in his account. These are too sensible proofs to be doubted ; and we shall find this much more so, in the names of more abstract and compounded ideas, such as are the greatest part of those which make up moral discourses : whose names, when men come curiously to compare with those they are translated into, in other languages, they will find very few of them exactly to correspond in the whole extent of their significations.

This shows species to be made for communication. § 9. The reason why I take so particular notice of this, is, that we may not be mistaken about genera and species, and their essences, as if they were things regularly and constantly made by nature, and had a real existence in things : when they appear, upon a more wary survey, to be nothing else but an artifice of the understanding, for the easier signifying such collections of ideas, as it should often have occasion to communicate by one general term ; under which divers particulars, as far forth as they agreed to that abstract idea, might be comprehended. And if the doubtful signification of the word species may make it sound harsh to some, that I say the species of mixed modes are made by the understanding ; yet, I think, it can by nobody be denied, that it is the mind makes those abstract complex ideas, to which specific names are given. And if it be true, as it is, that the mind makes the patterns for sorting and naming of things, I leave it to be considered who makes the boundaries of the sort or species ; since with me species and sort have no other difference than that of a Latin and English idiom.

In mixed modes it is the name that ties the combination together, and makes it a species. § 10. The near relation that there is between species, essences, and their general name, at least in mixed modes, will farther appear, when we consider that it is the name that seems to preserve those essences, and give them their lasting duration. For the connexion between the loose parts of those complex ideas being made by the mind, this

union, which has no particular foundation in nature, would cease again, were there not something that did, as it were, hold it together, and keep the parts from scattering. Though therefore it be the mind that makes the collection, it is the name which is as it were the knot that ties them fast together. What a vast variety of different ideas does the word triumphus hold together, and deliver to us as one species? Had this name been never made, or quite lost, we might, no doubt, have had descriptions of what passed in that solemnity: but yet, I think, that which holds those different parts together, in the unity of one complex idea, is that very word annexed to it; without which the several parts of that would no more be thought to make one thing, than any other show, which having never been made but once, had never been united into one complex idea, under one denomination. How much therefore, in mixed modes, the unity necessary to any essence depends on the mind, and how much the continuation and fixing of that unity depends on the name in common use annexed to it, I leave to be considered by those who look upon essences and species as real established things in nature.

§ 11. Suitable to this, we find, that men speaking of mixed modes, seldom imagine or take any other for species of them, but such as are set out by name: because they being of man's making only, in order to naming, no such species are taken notice of, or supposed to be, unless a name be joined to it, as the sign of man's having combined into one idea several loose ones; and by that name giving a lasting union to the parts, which could otherwise cease to have any, as soon as the mind laid by that abstract idea, and ceased actually to think on it. But when a name is once annexed to it, wherein the parts of that complex idea have a settled and permanent union; then is the essence as it were established, and the species looked on as complete. For to what purpose should the memory charge itself with such compositions, unless it were by abstraction to make them general? And to what purpose make them

general, unless it were that they might have general names for the convenience of discourse and communication? Thus we see, that killing a man with a sword or a hatchet, are looked on as no distinct species of action: but if the point of the sword first enter the body, it passes for a distinct species, where it has a distinct name; as in England, in whose language it is called stabbing: but in another country, where it has not happened to be specified under a peculiar name, it passes not for a distinct species. But in the species of corporeal substances, though it be the mind that makes the nominal essence; yet since those ideas which are combined in it are supposed to have an union in nature, whether the mind joins them or no, therefore those are looked on as distinct names, without any operation of the mind, either abstracting or giving a name to that complex idea.

For the originals of mixed modes, we look no farther than the mind, which also shows them to be the workmanship of the understanding.

§ 12. Conformable also to what has been said concerning the essences of the species of mixed modes, that they are the creatures of the understanding, rather than the works of nature; conformable, I say, to this, we find that their names lead our thoughts to the mind, and no farther. When we speak of justice, or gratitude, we frame to ourselves no imagination of any thing existing, which we would conceive; but our thoughts terminate in the abstract ideas of those virtues, and look no farther: as they do, when we speak of a horse, or iron, whose specific ideas we consider not, as barely in the mind, but as in things themselves, which afford the original patterns of those ideas. But in mixed modes, at least the most considerable parts of them, which are moral beings, we consider the original patterns as being in the mind; and to those we refer for the distinguishing of particular beings under names. And hence I think it is, that these essences of the species of mixed modes are by a more particular name called notions, as, by a peculiar right, appertaining to the understanding.

§ 13. Hence likewise we may learn, why the complex ideas of mixed modes are commonly more compounded and decompounded, than those of natural substances. Because they being the workmanship of the understanding, pursuing only its own ends, and the conveniency of expressing in short those ideas it would make known to another, it does with great liberty unite often into one abstract idea things that in their nature have no coherence; and so, under one term, bundle together a great variety of compounded and decompounded ideas. Thus the name of procession, what a great mixture of independent ideas of persons, habits, tapers, orders, motions, sounds, does it contain in that complex one, which the mind of man has arbitrarily put together, to express by that one name? Whereas the complex ideas of the sorts of substances are usually made up of only a small number of simple ones; and in the species of animals, these two, viz. shape and voice, commonly make the whole nominal essence.

Their being made by the understanding without patterns shows the reason why they are so compounded.

§ 14. Another thing we may observe from what has been said, is, that the names of mixed modes always signify (when they have any determined signification) the real essences of their species. For these abstract ideas being the workmanship of the mind, and not referred to the real existence of things, there is no supposition of any thing more signified by that name, but barely that complex idea the mind itself has formed, which is all it would have expressed by it: and is that on which all the properties of the species depend, and from which alone they all flow: and so in these the real and nominal essence is the same; which of what concernment it is to the certain knowledge of general truth, we shall see hereafter.

Names of mixed modes stand always for their real essences.

§ 15. This also may show us the reason, why for the most part the names of mixed modes are got, before the ideas they stand for are perfectly known. Because there being no species of these ordinarily taken

Why their names are usually got before their ideas,

notice of, but what have names; and those species, or rather their essences, being abstract complex ideas made arbitrarily by the mind; it is convenient, if not necessary, to know the names, before one endeavour to frame these complex ideas: unless a man will fill his head with a company of abstract complex ideas, which others having no names for, he has nothing to do with, but to lay by and forget again. I confess, that in the beginning of languages it was necessary to have the idea, before one gave it the name: and so it is still, where making a new complex idea, one also, by giving it a new name, makes a new word. But this concerns not languages made, which have generally pretty well provided for ideas, which men have frequent occasion to have and communicate: and in such, I ask, whether it be not the ordinary method, that children learn the names of mixed modes, before they have their ideas? What one of a thousand ever frames the abstract ideas of glory and ambition, before he has heard the names of them? In simple ideas and substances I grant it is otherwise; which being such ideas as have a real existence and union in nature, the ideas and names are got one before the other, as it happens.

Reason of my being so large on this subject. § 16. What has been said here of mixed modes is with very little difference applicable also to relations; which, since every

man himself may observe, I may spare myself the pains to enlarge on: especially, since what I have here said concerning words in this third book, will possibly be thought by some to be much more than what so slight a subject required. I allow it might be brought into a narrower compass: but I was willing to stay my reader on an argument that appears to me new, and a little out of the way, (I am sure it is one I thought not of when I began to write) that by searching it to the bottom, and turning it on every side, some part or other might meet with every one's thoughts, and give occasion to the most averse or negligent to reflect on a general miscarriage; which, though of great consequence, is little taken notice of. When it is considered what a pudder is made about

essences, and how much all sorts of knowledge, discourse, and conversation are pestered and disordered by the careless and confused use and application of words, it will perhaps be thought worth while thoroughly to lay it open. And I shall be pardoned if I have dwelt long on an argument which I think therefore needs to be inculcated; because the faults, men are usually guilty of in this kind, are not only the greatest hindrances of true knowledge, but are so well thought of as to pass for it. Men would often see what a small pittance of reason and truth, or possibly none at all, is mixed with those huffing opinions they are swelled with, if they would but look beyond fashionable sounds, and observe what ideas are, or are not comprehended under those words with which they are so armed at all points, and with which they so confidently lay about them. I shall imagine I have done some service to truth, peace, and learning, if, by any enlargement on this subject, I can make men reflect on their own use of language; and give them reason to suspect, that since it is frequent for others, it may also be possible for them to have sometimes very good and approved words in their mouths and writings, with very uncertain, little, or no signification. And therefore it is not unreasonable for them to be wary herein themselves, and not to be unwilling to have them examined by others. With this design therefore I shall go on with what I have farther to say concerning this matter.

CHAP. VI.

Of the Names of Substances.

§ 1. THE common names of substances, as well as other general terms, stand for sorts; which is nothing else but the being made signs of such complex ideas, wherein

The common names of substances stand for sorts.

several particular substances do, or might agree, by virtue of which they are capable of being comprehended in one common conception, and signified by one name. I say, do or might agree: for though there be but one sun existing in the world, yet the idea of it being abstracted, so that more substances (if there were several) might each agree in it; it is as much a sort, as if there were as many suns as there are stars. They want not their reasons who think there are, and that each fixed star would answer the idea the name sun stands for, to one who was placed in a due distance; which, by the way, may show us how much the sorts, or, if you please, genera and species of things (for those Latin terms signify to me no more than the English word sort) depend on such collections of ideas as men have made, and not on the real nature of things; since it is not impossible but that, in propriety of speech, that might be a sun to one, which is a star to another.

The essence of each sort is the abstract idea. § 2. The measure and boundary of each sort, or species, whereby it is constituted that particular sort, and distinguished from others, is that we call its essence, which is nothing but that abstract idea to which the name is annexed; so that every thing contained in that idea is essential to that sort. This, though it be all the essence of natural substances that we know, or by which we distinguish them into sorts; yet I call it by a peculiar name, the nominal essence, to distinguish it from the real constitution of substances, upon which depends this nominal essence, and all the properties of that sort; which therefore, as has been said, may be called the real essence: v. g. the nominal essence of gold is that complex idea the word gold stands for, let it be, for instance, a body yellow, of a certain weight, malleable, fusible, and fixed. But the real essence is the constitution of the insensible parts of that body, on which those qualities, and all the other properties of gold depend. How far these two are different, though they are both called essence, is obvious at first sight to discover.

§ 3. For though perhaps voluntary motion, with sense and reason, joined to a body of a certain shape, be the complex idea to which I, and others, annex the name man, and so be the nominal essence of the species so called ; yet nobody will say that complex idea is the real essence and source of all those operations which are to be found in any individual of that sort. The foundation of all those qualities, which are the ingredients of our complex idea, is something quite different ; and had we such a knowledge of that constitution of man, from which his faculties of moving, sensation, and reasoning, and other powers flow, and on which his so regular shape depends, as it is possible angels have, and it is certain his Maker has ; we should have a quite other idea of his essence than what now is contained in our definition of that species, be it what it will : and our idea of any individual man would be as far different from what it is now, as is his who knows all the springs and wheels, and other contrivances within, of the famous clock at Strasburgh, from that which a gazing countryman has for it, who barely sees the motion of the hand, and hears the clock strike, and observes only some of the outward appearances.

The nominal and real essence different.

§ 4. That essence, in the ordinary use of the word, relates to sorts ; and that it is considered in particular beings no farther than as they are ranked into sorts ; appears from hence : that take but away the abstract ideas, by which we sort individuals, and rank them under common names, and then the thought of any thing essential to any of them instantly vanishes ; we have no notion of the one without the other ; which plainly shows their relation. It is necessary for me to be as I am ; God and nature has made me so : but there is nothing I have is essential to me. An accident, or disease, may very much alter my colour, or shape ; a fever or fall, may take away my reason or memory, or both, and an apoplexy leave neither sense nor understanding, no nor life. Other creatures of my shape may be made with more and better, or fewer and worse faculties than I

Nothing essential to individuals.

have; and others may have reason and sense in a shape and body very different from mine. None of these are essential to the one, or the other, or to any individual whatever, till the mind refers it to some sort or species of things; and then presently, according to the abstract idea of that sort, something is found essential. Let any one examine his own thoughts, and he will find that as soon as he supposes or speaks of essential, the consideration of some species, or the complex idea, signified by some general name, comes into his mind; and it is in reference to that, that this or that quality is said to be essential. So that if it be asked, whether it be essential to me or any other particular corporeal being to have reason? I say no; no more than it is essential to this white thing I write on to have words in it. But if that particular being be to be counted of the sort man, and to have the name man given it, then reason is essential to it, supposing reason to be a part of the complex idea the name man stands for: as it is essential to this thing I write on to contain words, if I will give it the name treatise, and rank it under that species. So that essential, and not essential, relate only to our abstract ideas, and the names annexed to them; which amounts to no more but this, that whatever particular thing has not in it those qualities, which are contained in the abstract idea, which any general term stands for, cannot be ranked under that species, nor be called by that name, since that abstract idea is the very essence of that species.

§ 5. Thus, if the idea of body, with some people, be bare extension or space, then solidity is not essential to body: if others make the idea, to which they give the name body, to be solidity and extension, then solidity is essential to body. That therefore, and that alone, is considered as essential, which makes a part of the complex idea the name of a sort stands for, without which no particular thing can be reckoned of that sort, nor be intitled to that name. Should there be found a parcel of matter that had all the other qualities that are in iron, but wanted obedience to the loadstone; and would neither be drawn by it, nor receive direction

from it; would any one question, whether it wanted any thing essential? It would be absurd to ask, Whether a thing really existing wanted any thing essential to it? Or could it be demanded, Whether this made an essential or specific difference or no: since we have no other measure of essential or specific but our abstract ideas? And to talk of specific differences in nature, without reference to general ideas and names, is to talk unintelligibly. For I would ask any one, What is sufficient to make an essential difference in nature, between any two particular beings, without any regard had to some abstract idea, which is looked upon as the essence and standard of a species? All such patterns and standards being quite laid aside, particular beings, considered barely in themselves, will be found to have all their qualities equally essential; and every thing, in each individual, will be essential to it, or, which is more, nothing at all. For though it may be reasonable to ask, Whether obeying the magnet be essential to iron? yet, I think, it is very improper and insignificant to ask, Whether it be essential to the particular parcel of matter I cut my pen with, without considering it under the name iron, or as being of a certain species? And if, as has been said, our abstract ideas, which have names annexed to them, are the boundaries of species, nothing can be essential but what is contained in those ideas.

§ 6. It is true, I have often mentioned a real essence, distinct in substances from those abstract ideas of them, which I call their nominal essence. By this real essence I mean the real constitution of any thing, which is the foundation of all those properties that are combined in, and are constantly found to co-exist with the nominal essence; that particular constitution which every thing has within itself, without any relation to any thing without it. But essence, even in this sense, relates to a sort, and supposes a species; for being that real constitution, on which the properties depend, it necessarily supposes a sort of things, properties belonging only to species, and not to individuals; v.g. supposing the nominal essence of gold to be a body of such

a peculiar colour and weight, with malleability and fusibility, the real essence is that constitution of the parts of matter, on which these qualities and their union depend: and is also the foundation of its solubility in aqua regia and other properties accompanying that complex idea. Here are essences and properties, but all upon supposition of a sort, or general abstract idea, which is considered as immutable; but there is no individual parcel of matter, to which any of these qualities are so annexed, as to be essential to it, or inseparable from it. That which is essential belongs to it as a condition, whereby it is of this or that sort; but take away the consideration of its being ranked under the name of some abstract idea, and then there is nothing necessary to it, nothing inseparable from it. Indeed, as to the real essences of substances, we only suppose their being, without precisely knowing what they are: but that which annexes them still to the species, is the nominal essence, of which they are the supposed foundation and cause.

The nominal essence bounds the species. § 7. The next thing to be considered, is, by which of those essences it is that substances are determined into sorts, or species; and that, it is evident, is by the nominal essence. For it is that alone that the name, which is the mark of the sort, signifies. It is impossible therefore that any thing should determine the sorts of things, which we rank under general names, but that idea which that name is designed as a mark for; which is that, as has been shown, which we call nominal essence. Why do we say, this is a horse, that a mule; this is an animal, that an herb? How comes any particular thing to be of this or that sort, but because it has that nominal essence, or, which is all one, agrees to that abstract idea that name is annexed to? And I desire any one but to reflect on his own thoughts, when he hears or speaks any of those, or other names of substances, to know what sort of essences they stand for.

§ 8. And that the species of things to us are nothing but the ranking them under distinct names, ac-

according to the complex ideas in us, and not according to precise, distinct, real essences in them; is plain from hence, that we find many of the individuals that are ranked into one sort, called by one common name, and so received as being of one species, have yet qualities depending on their real constitutions, as far different one from another, as from others, from which they are accounted to differ specifically. This, as it is easy to be observed by all who have to do with natural bodies; so chemists especially are often, by sad experience, convinced of it, when they, sometimes in vain, seek for the same qualities in one parcel of sulphur, antimony or vitriol, which they have found in others. For though they are bodies of the same species, having the same nominal essence, under the same name; yet do they often, upon severe ways of examination, betray qualities so different one from another, as to frustrate the expectation and labour of very wary chemists. But if things were distinguished into species, according to their real essences, it would be as impossible to find different properties in any two individual substances of the same species, as it is to find different properties in two circles, or two equilateral triangles. That is properly the essence to us, which determines every particular to this or that classis; or, which is the same thing, to this or that general name; and what can that be else, but that abstract idea, to which that name is annexed? and so has, in truth, a reference, not so much to the being of particular things, as to their general denominations.

§ 9. Nor indeed can we rank and sort things, and consequently (which is the end of sorting) denominate them by their real essences, because we know them not. Our faculties carry us no farther towards the knowledge and distinction of substances, than a collection of those sensible ideas which we observe in them; which, however made with the greatest diligence and exactness we are capable of, yet is more remote from the true internal constitution, from which those qualities flow, than,

Not the real
essence,
which we
know not.

as I said, a countryman's idea is from the inward contrivance of that famous clock at Strasburgh, whereof he only sees the outward figure and motions. There is not so contemptible a plant or animal, that does not confound the most enlarged understanding. Though the familiar use of things about us take off our wonder; yet it cures not our ignorance. When we come to examine the stones we tread on, or the iron we daily handle, we presently find we know not their make, and can give no reason of the different qualities we find in them. It is evident the internal constitution, whereon their properties depend, is unknown to us. For to go no farther than the grossest and most obvious we can imagine amongst them, what is that texture of parts, that real essence, that makes lead and antimony fusible; wood and stones not? What makes lead and iron malleable, antimony and stones not? And yet how infinitely these come short of the fine contrivances, and unconceivable real essences of plants or animals, every one knows. The workmanship of the all-wise and powerful God, in the great fabric of the universe, and every part thereof, farther exceeds the capacity and comprehension of the most inquisitive and intelligent man, than the best contrivance of the most ingenious man doth the conceptions of the most ignorant of rational creatures. Therefore we in vain pretend to range things into sorts, and dispose them into certain classes, under names, by their real essences, that are so far from our discovery or comprehension. A blind man may as soon sort things by their colours, and he that has lost his smell, as well distinguish a lily and a rose by their odours, as by those internal constitutions which he knows not. He that thinks he can distinguish sheep and goats by their real essences, that are unknown to him, may be pleased to try his skill in those species, called cassiowary and querechinchio; and by their internal real essences determine the boundaries of those species, without knowing the complex idea of sensible qualities, that each of those names stand for, in the countries where those animals are to be found.

§ 10. Those therefore who have been taught, that the several species of substances had their distinct internal substantial forms ; and that it was those forms which made the distinction of substances into their true species and genera ; were led yet farther out of the way, by having their minds set upon fruitless inquiries after substantial forms, wholly unintelligible, and whereof we have scarce so much as any obscure or confused conception in general.

§ 11. That our ranking and distinguishing natural substances into species, consists in the nominal essences the mind makes, and not in the real essences to be found in the things themselves, is farther evident from our ideas of spirits. For the mind getting, only by reflecting on its own operations, those simple ideas which it attributes to spirits, it hath, or can have no other notion of spirit, but by attributing all those operations, it finds in itself, to a sort of beings, without consideration of matter. And even the most advanced notion we have of God is but attributing the same simple ideas which we have got from reflection on what we find in ourselves, and which we conceive to have more perfection in them, than would be in their absence ; attributing, I say, those simple ideas to him in an unlimited degree. Thus having got, from reflecting on ourselves, the idea of existence, knowledge, power, and pleasure, each of which we find it better to have than to want ; and the more we have of each, the better : joining all these together, with infinity to each of them, we have the complex idea of an eternal, omniscient, omnipotent, infinitely wise and happy Being. And though we are told, that there are different species of angels ; yet we know not how to frame distinct specific ideas of them ; not out of any conceit that the existence of more species than one of spirits is impossible, but because having no more simple ideas (nor being able to frame more) applicable to such beings, but only those few taken from ourselves, and from the actions of our own minds in

Not substantial forms, which we know less.

That the nominal essence is that whereby we distinguish species, farther evident from spirits.

thinking, and being delighted, and moving several parts of our bodies, we can no otherwise distinguish in our conceptions the several species of spirits one from another, but by attributing those operations and powers, we find in ourselves, to them in a higher or lower degree; and so have no very distinct specific ideas of spirits, except only of God, to whom we attribute both duration, and all those other ideas with infinity; to the other spirits, with limitation. Nor as I humbly conceive do we, between God and them in our ideas, put any difference by any number of simple ideas, which we have of one, and not of the other, but only that of infinity. All the particular ideas of existence, knowledge, will, power, and motion, &c. being ideas derived from the operations of our minds, we attribute all of them to all sorts of spirits, with the difference only of degrees, to the utmost we can imagine, even infinity, when we would frame, as well as we can, an idea of the first being; who yet, it is certain, is infinitely more remote, in the real excellency of his nature, from the highest and perfectest of all created beings, than the greatest man, nay purest seraph, is from the most contemptible part of matter; and consequently must infinitely exceed what our narrow understandings can conceive of him.

Whereof there are probably numberless species. § 12. It is not impossible to conceive, nor repugnant to reason, that there may be many species of spirits, as much separated and diversified one from another by distinct properties whereof we have no ideas, as the species of sensible things are distinguished one from another by qualities which we know, and observe in them. That there should be more species of intelligent creatures above us, than there are of sensible and material below us, is probable to me from hence; that in all the visible corporeal world, we see no chasms or gaps. All quite down from us the descent is by easy steps, and a continued series of things, that in each remove differ very little one from the other. There are fishes that have wings, and are not strangers to the airy region; and there are some birds that are inhabi-

tants of the water, whose blood is cold as fishes, and their flesh so like in taste, that the scrupulous are allowed them on fish-days. There are animals so near of kin both to birds and beasts, that they are in the middle between both: amphibious animals link the terrestrial and aquatic together; seals live at land and sea, and porpoises have the warm blood and entrails of a hog, not to mention what is confidently reported of mermaids or sea-men. There are some brutes, that seem to have as much knowledge and reason, as some that are called men; and the animal and vegetable kingdoms are so nearly joined, that if you will take the lowest of one, and the highest of the other, there will scarce be perceived any great difference between them; and so on, till we come to the lowest and the most inorganic parts of matter, we shall find every-where, that the several species are linked together, and differ but in almost insensible degrees. And when we consider the infinite power and wisdom of the Maker, we have reason to think, that it is suitable to the magnificent harmony of the universe, and the great design and infinite goodness of the architect, that the species of creatures should also, by gentle degrees, ascend upward from us toward his infinite perfection, as we see they gradually descend from us downwards: which if it be probable, we have reason then to be persuaded, that there are far more species of creatures above us, than there are beneath: we being, in degrees of perfection, much more remote from the infinite being of God, than we are from the lowest state of being, and that which approaches nearest to nothing. And yet of all those distinct species, for the reasons abovesaid, we have no clear distinct ideas.

§ 13. But to return to the species of corporeal substances. If I should ask any one, whether ice and water were two distinct species of things, I doubt not but I should be answered in the affirmative: and it cannot be denied, but he that says they are two distinct species is in the right. But if an Englishman, bred in Jamaica, who perhaps had never

The nominal essence that of the species, proved from water and ice.

seen nor heard of ice, coming into England in the winter, find the water, he put in his bason at night, in a great part frozen in the morning, and not knowing any peculiar name it had, should call it hardened water; I ask, whether this would be a new species to him different from water? And, I think, it would be answered here, it would not be to him a new species, no more than congealed jelly, when it is cold, is a distinct species from the same jelly fluid and warm; or than liquid gold, in the furnace, is a distinct species from hard gold in the hands of a workman. And if this be so, it is plain, that our distinct species are nothing but distinct complex ideas, with distinct names annexed to them. It is true, every substance that exists has its peculiar constitution, whereon depend those sensible qualities and powers we observe in it; but the ranking of things into species, which is nothing but sorting them under several titles, is done by us according to the ideas that we have of them: which though sufficient to distinguish them by names, so that we may be able to discourse of them, when we have them not present before us; yet if we suppose it to be done by their real internal constitutions, and that things existing are distinguished by nature into species, by real essences, according as we distinguish them into species by names, we shall be liable to great mistakes.

Difficulties against a certain number of real essences. § 14. To distinguish substantial beings into species, according to the usual supposition, that there are certain precise essences or forms of things, whereby all the individuals existing are by nature distinguished into species, these things are necessary.

§ 15. First, To be assured that nature, in the production of things, always designs them to partake of certain regulated established essences, which are to be the models of all things to be produced. This, in that crude sense it is usually proposed, would need some better explication before it can fully be assented to.

§ 16. Secondly, It would be necessary to know whether nature always attains that essence it designs in the production of things. The irregular and monstrous

births, that in divers sorts of animals have been observed, will always give us reason to doubt of one or both of these.

§ 17. Thirdly, It ought to be determined whether those we call monsters be really a distinct species, according to the scholastic notion of the word species; since it is certain, that every thing that exists has its particular constitution: and yet we find that some of these monstrous productions have few or none of those qualities, which are supposed to result from, and accompany the essence of that species, from whence they derive their originals, and to which, by their descent, they seem to belong.

§ 18. Fourthly, The real essences of those things, which we distinguish into species, and as so distinguished we name, ought to be known; i. e. we ought to have ideas of them. But since we are ignorant in these four points, the supposed real essences of things stand us not in stead for the distinguishing substances into species.

Our nominal
essences of
substances
not perfect
collections
of proper-
ties.

§ 19. Fifthly, The only imaginable help in this case would be, that having framed perfect complex ideas of the properties of things, flowing from their different real essences, we should thereby distinguish them into species. But neither can this be done; for being ignorant of the real essence itself, it is impossible to know all those properties that flow from it, and are so annexed to it, that any one of them being away, we may certainly conclude, that that essence is not there, and so the thing is not of that species. We can never know what is the precise number of properties depending on the real essence of gold, any one of which failing, the real essence of gold, and consequently gold, would not be there, unless we knew the real essence of gold itself, and by that determined that species. By the word gold here, I must be understood to design a particular piece of matter; v. g. the last guinea that was coined. For if it should stand here in its ordinary signification for that complex idea, which I or any one else calls gold; i. e. for the nominal essence of gold, it

would be jargon: so hard is it to show the various meaning and imperfection of words, when we have nothing else but words to do it by.

§ 20. By all which it is clear, that our distinguishing substances into species by names, is not at all founded on their real essences; nor can we pretend to range and determine them exactly into species, according to internal essential differences.

But such a collection as our name stands for. § 21. But since, as has been remarked, we have need of general words, though we know not the real essences of things; all we can do is to collect such a number of simple ideas, as by examination we find to be united together in things existing, and therefore to make one complex idea. Which though it be not the real essence of any substance that exists, is yet the specific essence, to which our name belongs, and is convertible with it; by which we may at least try the truth of these nominal essences. For example, there be that say, that the essence of body is extension: if it be so, we can never mistake in putting the essence of any thing for the thing itself. Let us then in discourse put extension for body; and when we would say that body moves, let us say that extension moves, and see how ill it would look. He that should say that one extension by impulse moves another extension, would, by the bare expression, sufficiently show the absurdity of such a notion. The essence of any thing, in respect of us, is the whole complex idea, comprehended and marked by that name; and in substances, besides the several distinct simple ideas that make them up, the confused one of substance, or of an unknown support and cause of their union, is always a part: and therefore the essence of body is not bare extension, but an extended solid thing: and so to say an extended solid thing moves, or impels another, is all one, and as intelligible as to say, body moves or impels. Likewise to say, that a rational animal is capable of conversation, is all one as to say a man. But no one will say, that rationality is capable of conversation, because it makes not the whole essence to which we give the name man.

§ 22. There are creatures in the world that have shapes like ours, but are hairy, and want language and reason. There are naturals amongst us that have perfectly our shape, but want reason, and some of them language too. There are creatures, as it is said (*"sit fides penes authorem,"* but there appears no contradiction that there should be such) that, with language and reason, and a shape in other things agreeing with ours, have hairy tails; others where the males have no beards, and others where the females have. If it be asked, whether these be all men or no, all of human species? It is plain, the question refers only to the nominal essence: for those of them to whom the definition of the word man, or the complex idea signified by that name, agrees, are men, and the other not. But if the inquiry be made concerning the supposed real essence, and whether the internal constitution and frame of these several creatures be specifically different, it is wholly impossible for us to answer, no part of that going into our specific idea; only we have reason to think, that where the faculties or outward frame so much differs, the internal constitution is not exactly the same. But what difference in the internal real constitution makes a specific difference, it is in vain to inquire; whilst our measures of species be, as they are, only our abstract ideas, which we know; and not that internal constitution, which makes no part of them. Shall the difference of hair only on the skin, be a mark of a different internal specific constitution between a changeling and a drill, when they agree in shape, and want of reason and speech? And shall not the want of reason and speech be a sign to us of different real constitutions and species between a changeling and a reasonable man? And so of the rest, if we pretend that distinction of species or sorts is fixedly established by the real frame and secret constitutions of things.

§ 23. Nor let any one say, that the power of propagation in animals by the mixture of male and female, and in plants by seeds,

Our abstract ideas are to us the measures of species; instance in that of man.

Species not distinguished by generation.

keeps the supposed real species distinct and entire. For granting this to be true, it would help us in the distinction of the species of things no farther than the tribes of animals and vegetables. What must we do for the rest? But in those too it is not sufficient: for if history lye not, women have conceived by drills; and what real species, by that measure, such a production will be in nature, will be a new question: and we have reason to think this is not impossible, since mules and jumarts, the one from the mixture of an ass and a mare, the other from the mixture of a bull and a mare, are so frequent in the world. I once saw a creature that was the issue of a cat and a rat, and had the plain marks of both about it; wherein nature appeared to have followed the pattern of neither sort alone, but to have jumbled them together. To which, he that shall add the monstrous productions that are so frequently to be met with in nature, will find it hard, even in the race of animals, to determine by the pedigree of what species every animal's issue is; and be at a loss about the real essence, which he thinks certainly conveyed by generation, and has alone a right to the specific name. But farther, if the species of animals and plants are to be distinguished only by propagation, must I go to the Indies to see the sire and dam of the one, and the plant from which the seed was gathered that produced the other, to know whether this be a tyger or that tea?

Not by substantial forms.

§ 24. Upon the whole matter, it is evident, that it is their own collections of sensible qualities, that men make the essences of their several sorts of substances; and that their real internal structures are not considered by the greatest part of men, in the sorting them. Much less were any substantial forms ever thought on by any, but those who have in this one part of the world learned the language of the schools: and yet those ignorant men, who pretend not any insight into the real essences, nor trouble themselves about substantial forms, but are content with knowing things one from another by their sensible qualities

are often better acquainted with their differences, can more nicely distinguish them from their uses, and better know what they expect from each, than those learned quick-sighted men, who look so deep into them, and talk so confidently of something more hidden and essential.

§ 25. But supposing that the real es-
sences of substances were discoverable by those that would severely apply themselves to that inquiry, yet we could not reasonably think, that the ranking of things under general names was regulated by those internal real constitutions, or any thing else but their obvious appearances: since languages, in all countries, have been established long before sciences. So that they have not been philosophers, or logicians, or such who have troubled themselves about forms and essences, that have made the general names that are in use amongst the several nations of men; but those more or less comprehensive terms have for the most part, in all languages, received their birth and signification from ignorant and illiterate people, who sorted and denominated things by those sensible qualities they found in them; thereby to signify them, when absent, to others, whether they had an occasion to mention a sort or a particular thing.

§ 26. Since then it is evident, that we
sort and name substances by their nominal,
and not by their real essences; the next
thing to be considered is, how and by
whom these essences come to be made. As to the latter, it is evident they are made by the mind, and not by nature: for were they nature's workmanship, they could not be so various and different in several men, as experience tells us they are. For if we will examine it, we shall not find the nominal essence of any one species of substances in all men the same; no not of that, which of all others we are the most intimately acquainted with. It could not possibly be, that the abstract idea to which the name man is given, should be different in several men, if it were of nature's making;

The specific
essences are
made by the
mind.

Therefore
very various
and uncertain.

and that to one it should be "animal rationale," and to another, "animal implume bipes latis unguibus." He that annexes the name man to a complex idea made up of sense and spontaneous motion, joined to a body of such a shape, has thereby one essence of the species man; and he that, upon farther examination, adds rationality, has another essence of the species he calls man: by which means, the same individual will be a true man to the one, which is not so to the other. I think, there is scarce any one will allow this upright figure, so well known, to be the essential difference of the species man; and yet how far men determine of the sorts of animals rather by their shape than descent, is very visible: since it has been more than once debated, whether several human fœtuses should be preserved or received to baptism or no, only because of the difference of their outward configuration from the ordinary make of children, without knowing whether they were not as capable of reason, as infants cast in another mould: some whereof, though of an approved shape, are never capable of as much appearance of reason all their lives, as is to be found in an ape, or an elephant, and never give any signs of being acted by a rational soul. Whereby it is evident, that the outward figure, which only was found wanting, and not the faculty of reason, which nobody could know would be wanting in its due season, was made essential to the human species. The learned divine and lawyer must, on such occasions, renounce his sacred definition of "animal rationale," and substitute some other essence of the human species. Monsieur Menage furnishes us with an example worth the taking notice of on this occasion; "When the abbot of St. Martin (says he) was born, he had so little of the figure of a man, that it bespoke him rather a monster. It was for some time under deliberation, whether he should be baptized or no. However, he was baptized and declared a man provisionally [till time should show what he would prove.] Nature had moulded him so untowardly, that he was called all his life the Abbot Malotru, i. e. ill-shaped. He was of Caen. Menagiana, †††."

This child, we see, was very near being excluded out of the species of man, barely by his shape. He escaped very narrowly as he was, and it is certain a figure a little more oddly turned had cast him, and he had been executed as a thing not to be allowed to pass for a man. And yet there can be no reason given, why if the lineaments of his face had been a little altered, a rational soul could not have been lodged in him: why a visage somewhat longer, or a nose flatter, or a wider mouth, could not have consisted, as well as the rest of his ill figure, with such a soul, such parts, as made him, disfigured as he was, capable to be a dignitary in the church.

§ 27. Wherein then, would I gladly know, consist the precise and unmovable boundaries of that species? It is plain, if we examine, there is no such thing made by nature, and established by her amongst men. The real essence of that, or any other sort of substances, it is evident we know not: and therefore are so undetermined in our nominal essences, which we make ourselves, that if several men were to be asked concerning some oddly shaped foetus, as soon as born, whether it were a man or no, it is past doubt, one should meet with different answers. Which could not happen, if the nominal essences, whereby we limit and distinguish the species of substances, were not made by man, with some liberty; but were exactly copied from precise boundaries set by nature, whereby it distinguished all substances into certain species. Who would undertake to resolve, what species that monster was of, which is mentioned by Licetus, lib. i. c. 3. with a man's head and hog's body? Or those other, which to the bodies of men had the heads of beasts, as dogs, horses, &c. If any of these creatures had lived, and could have spoke, it would have increased the difficulty. Had the upper part, to the middle, been of human shape, and all below swine; had it been murder to destroy it? Or must the bishop have been consulted, whether it were man enough to be admitted to the font or no? as, I have been told, it happened in France some years since, in somewhat a like case. So uncertain are the

boundaries of species of animals to us, who have no other measures than the complex ideas of our own collecting ; and so far are we from certainly knowing what a man is ; though, perhaps it will be judged great ignorance to make any doubt about it. And yet, I think, I may say, that the certain boundaries of that species are so far from being determined, and the precise number of simple ideas, which make the nominal essence, so far from being settled and perfectly known, that very material doubts may still arise about it. And I imagine, none of the definitions of the word man, which we yet have, nor descriptions of that sort of animal, are so perfect and exact, as to satisfy a considerate inquisitive person ; much less to obtain a general consent, and to be that which men would every-where stick by, in the decision of cases, and determining of life and death, baptism, or no baptism, in productions that might happen.

But not so arbitrary as mixed modes. § 28. But though these nominal essences of substances are made by the mind, they are not yet made so arbitrarily as those of mixed modes. To the making of any nominal essence, it is necessary, First, that the ideas whereof it consists have such an union as to make but one idea, how compounded soever. Secondly, that the particular idea so united be exactly the same, neither more nor less. For if two abstract complex ideas differ either in number or sorts of their component parts, they make two different, and not one and the same essence. In the first of these, the mind, in making its complex ideas of substances, only follows nature ; and puts none together, which are not supposed to have an union in nature. Nobody joins the voice of a sheep with the shape of a horse ; nor the colour of lead, with the weight and fixedness of gold ; to be the complex ideas of any real substances : unless he has a mind to fill his head with chimeras, and his discourse with unintelligible words. Men observing certain qualities always joined and existing together, therein copied nature ; and of ideas so united, made their complex ones of substances. For though men may make what complex ideas they please,

and give what names to them they will: yet if they will be understood, when they speak of things really existing, they must in some degree conform their ideas to the things they would speak of: or else men's language will be like that of Babel; and every man's words being intelligible only to himself, would no longer serve to conversation, and the ordinary affairs of life, if the ideas they stand for be not some way answering the common appearances and agreement of substances, as they really exist.

§ 29. Secondly, though the mind of man, Though very imperfect. in making its complex ideas of substances, never puts any together that do not really or are not supposed to co-exist; and so it truly borrows that union from nature; yet the number it combines depends upon the various care, industry, or fancy of him that makes it. Men generally content themselves with some few sensible obvious qualities; and often, if not always, leave out others as material, and as firmly united, as those that they take. Of sensible substances there are two sorts; one of organized bodies, which are propagated by seed; and in these, the shape is that, which to us is the leading quality and most characteristic part that determines the species. And therefore in vegetables and animals, an extended solid substance of such a certain figure usually serves the turn. For however some men seem to prize their definition of "animal rationale," yet should there a creature be found, that had language and reason, but partook not of the usual shape of a man, I believe it would hardly pass for a man, how much soever it were "animal rationale." And if Balaam's ass had, all his life, discoursed as rationally as he did once with his master, I doubt yet whether any one would have thought him worthy the name man, or allowed him to be of the same species with himself. As in vegetables and animals it is the shape, so in most other bodies, not propagated by seed, it is the colour we most fix on, and are most led by. Thus where we find the colour of gold, we are apt to imagine all the other qualities, comprehended in our complex idea, to be there also:

and we commonly takè these two obvious qualities, viz. shape and colour, for so presumptive ideas of several species; that in a good picture we readily say this is a lion, and that a rose; this is a gold, and that a silver goblet, only by the different figures and colours represented to the eye by the pencil.

Which yet § 30. But though this serves well
serve for enough for gross and confused conceptions,
common and inaccurate ways of talking and think-
converse. ing; yet men are far enough from having
agreed on the precise number of simple ideas, or qualities, belonging to any sort of things, signified by its name. Nor is it a wonder, since it requires much time, pains, and skill, strict inquiry, and long examination, to find out what and how many those simple ideas are, which are constantly and inseparably united in nature, and are always to be found together in the same subject. Most men wanting either time, inclination, or industry enough for this, even to some tolerable degree, content themselves with some few obvious and outward appearances of things, thereby readily to distinguish and sort them for the common affairs of life: and so, without farther examination, give them names, or take up the names already in use. Which, though in common conversation they pass well enough for the signs of some few obvious qualities co-existing, are yet far enough from comprehending, in a settled signification, a precise number of simple ideas; much less all those which are united in nature. He that shall consider, after so much stir about genus and species, and such a deal of talk of specific differences, how few words we have yet settled definitions of; may with reason imagine that those forms, which there hath been so much noise made about, are only chimeras, which give us no light into the specific natures of things. And he that shall consider, how far the names of substances are from having significations, wherein all who use them do agree, will have reason to conclude, that though the nominal essences of substances are all supposed to be copied from nature, yet they are all, or most of them, very imperfect. Since the composition of those complex ideas are, in several

men, very different; and therefore that these boundaries of species are as men, and not as nature makes them, if at least there are in nature any such prefixed bounds. It is true, that many particular substances are so made by nature, that they have agreement and likeness one with another, and so afford a foundation of being ranked into sorts. But the sorting of things by us, or the making of determinate species, being in order to naming and comprehending them under general terms; I cannot see how it can be properly said, that nature sets the boundaries of the species of things: or if it be so, our boundaries of species are not exactly conformable to those in nature. For we having need of general names for present use, stay not for a perfect discovery of all those qualities which would best show us their most material differences and agreements; but we ourselves divide them, by certain obvious appearances, into species, that we may the easier under general names communicate our thoughts about them. For having no other knowledge of any substance, but of the simple ideas that are united in it; and observing several particular things to agree with others in several of those simple ideas; we make that collection our specific idea, and give it a general name; that in recording our thoughts, and in our discourse with others, we may in one short word design all the individuals that agree in that complex idea, without enumerating the simple ideas that make it up; and so not waste our time and breath in tedious descriptions: which we see they are fain to do, who would discourse of any new sort of things they have not yet a name for.

§ 31. But however these species of substances pass well enough in ordinary conversation, it is plain that this complex idea, wherein they observe several individuals to agree, is by different men made very differently; by some more, and others less accurately. In some, this complex idea contains a greater, and in others a smaller number of qualities; and so is apparently such as the mind makes it. The yellow shining

Essences of species under the same name very different.

colour makes gold to children; others add weight, malleableness, and fusibility; and others yet other qualities, which they find joined with that yellow colour, as constantly as its weight and fusibility; for in all these and the like qualities, one has as good a right to be put into the complex idea of that substance wherein they are all joined as another. And therefore different men leaving out or putting in several simple ideas, which others do not, according to their various examination, skill, or observation of that subject, have different essences of gold: which must therefore be of their own, and not of nature's making.

The more general our ideas are, the more incomplete and partial they are. § 32. If the number of simple ideas, that make the nominal essence of the lowest species, or first sorting of individuals, depends on the mind of man variously collecting them, it is much more evident that they do so, in the more comprehensive classes, which by the masters of logic are called genera. These are complex ideas designedly imperfect: and it is visible at first sight, that several of those qualities that are to be found in the things themselves, are purposely left out of generical ideas. For as the mind, to make general ideas comprehending several particulars, leaves out those of time, and place, and such other, that make them incommunicable to more than one individual; so to make other yet more general ideas, that may comprehend different sorts, it leaves out those qualities that distinguish them, and puts into its new collection only such ideas as are common to several sorts. The same convenience that made men express several parcels of yellow matter coming from Guinea and Peru under one name, sets them also upon making of one name that may comprehend both gold and silver, and some other bodies of different sorts. This is done by leaving out those qualities, which are peculiar to each sort; and retaining a complex idea made up of those that are common to them all; to which the name metal being annexed, there is a genus constituted; the essence whereof being that abstract

idea, containing only malleableness and fusability, with certain degrees of weight and fixedness, wherein some bodies of several kinds agree, leaves out the colour, and other qualities peculiar to gold and silver, and the other sorts comprehended under the name metal. Whereby it is plain, that men follow not exactly the patterns set them by nature, when they make their general ideas of substances; since there is no body to be found, which has barely malleableness and fusibility in it, without other qualities as inseparable as those. But men, in making their general ideas, seeing more the convenience of language and quick dispatch, by short and comprehensive signs, than the true and precise nature of things as they exist, have, in the framing their abstract ideas, chiefly pursued that end, which was to be furnished with store of general and variously comprehensive names. So that in this whole business of genera and species, the genus, or more comprehensive, is but a partial conception of what is in the species, and the species but a partial idea of what is to be found in each individual. If therefore any one will think, that a man, and a horse, and an animal, and a plant, &c. are distinguished by real essences made by nature, he must think nature to be very liberal of these real essences, making one for body, another for an animal, and another for a horse; and all these essences liberally bestowed upon Bucephalus. But if we would rightly consider what is done in all these genera and species, or sorts, we should find, that there is no new thing made, but only more or less comprehensive signs, whereby we may be enabled to express, in a few syllables, great numbers of particular things, as they agree in more or less general conceptions, which we have framed to that purpose. In all which we may observe, that the more general term is always the name of a less complex idea; and that each genus is but a partial conception of the species comprehended under it. So that if these abstract general ideas be thought to be complete, it can only be in respect of a certain esta-

blished relation between them and certain names, which are made use of to signify them; and not in respect of any thing existing, as made by nature.

§ 33. This is adjusted to the true end of ^{This all accommodated to the end of speech.} speech, which is to be the easiest and shortest way of communicating our notions. For thus he, that would discourse of things as they agreed in the complex ideas of extension and solidity, needed but use the word body, to denote all such. He that to these would join others, signified by the words life, sense, and spontaneous motion, needed but use the word animal, to signify all which partook of those ideas: and he that had made a complex idea of a body, with life, sense, and motion, with the faculty of reasoning, and a certain shape joined to it, needed but use the short monosyllable man to express all particulars that correspond to that complex idea. This is the proper business of genus and species: and this men do, without any consideration of real essences, or substantial forms, which come not within the reach of our knowledge, when we think of those things: nor within the signification of our words, when we discourse with others.

Instance in cassuaries. § 34. Were I to talk with any one of a sort of birds I lately saw in St. James's Park, about three or four feet high, with a covering of something between feathers and hair, of a dark brown colour, without wings, but in the place thereof two or three little branches coming down like sprigs of Spanish broom, long great legs, with feet only of three claws, and without a tail; I must make this description of it, and so may make others understand me: but when I am told that the name of it is cassuaris, I may then use that word to stand in discourse for all my complex idea mentioned in that description; though by that word, which is now become a specific name, I know no more of the real essence or constitution of that sort of animals than I did before;

and knew probably as much of the nature of that species of birds, before I learned the name, as many Englishmen do of swans, or herons, which are specific names, very well known, of sorts of birds common in England.

§ 35. From what has been said, it is evident, that men make sorts of things. Men determine the sorts. For it being different essences alone that make different species, it is plain that they who make those abstract ideas, which are the nominal essences, do thereby make the species, or sort. Should there be a body found, having all the other qualities of gold, except malleableness, it would no doubt be made a question whether it were gold or no, i. e. whether it were of that species. This could be determined only by that abstract idea, to which every one annexed the name gold; so that it would be true gold to him, and belong to that species, who included not a malleableness in his nominal essence, signified by the sound gold; and on the other side it would not be true gold, or of that species, to him who included malleableness in his specific idea. And who, I pray, is it that makes these diverse species even under one and the same name, but men that make two different abstract ideas consisting not exactly of the same collection of qualities? Nor is it a mere supposition to imagine that a body may exist, wherein the other obvious qualities of gold may be without malleableness; since it is certain, that gold itself will be sometimes so eager (as artists call it) that it will as little endure the hammer as glass itself. What we have said, of the putting in, or leaving malleableness out of the complex idea the name gold is by any one annexed to, may be said of its peculiar weight, fixedness, and several other the like qualities; for whatsoever is left out, or put in, it is still the complex idea, to which that name is annexed, that makes the species; and as any particular parcel of matter answers that idea, so the name of the sort belongs truly to it; and it is of that species. And thus any thing is true gold, perfect

metal. All which determination of the species, it is plain, depends on the understanding of man, making this or that complex idea.

§ 36. This then, in short, is the case ;
 Nature makes the similitude. nature makes many particular things which do agree one with another, in many sensible qualities, and probably too in their internal frame and constitution : but it is not this real essence that distinguishes them into species ; it is men, who, taking occasion from the qualities they find united in them, and wherein they observe often several individuals to agree, range them into sorts, in order to their naming, for the convenience of comprehensive signs ; under which individuals, according to their conformity to this or that abstract idea, come to be ranked as under ensigns ; so that this is of the blue, that the red regiment ; this is a man, that a drill : and in this, I think, consists the whole business of genus and species.

§ 37. I do not deny but nature, in the constant production of particular beings, makes them not always new and various, but very much alike and of kin one to another : but I think it nevertheless true, that the boundaries of the species whereby men sort them, are made by men ; since the essences of the species, distinguished by different names, are, as has been proved, of man's making, and seldom adequate to the internal nature of the things they are taken from. So that we may truly say, such a manner of sorting of things is the workmanship of men.

Each abstract idea is an essence. § 38. One thing I doubt not but will seem very strange in this doctrine ; which is, that from what has been said it will follow, that each abstract idea, with a name to it, makes a distinct species. But who can help it if truth will have it so ? For so it must remain till some body can show us the species of things limited and distinguished by something else ; and let us see, that general terms signify not our abstract ideas, but something different from them. I would fain know why a

shock and a hound are not as distinct species as a spaniel and an elephant. We have no other idea of the different essence of an elephant and a spaniel, than we have of the different essence of a shock and a hound; all the essential difference, whereby we know and distinguish them one from another, consisting only in the different collection of simple ideas, to which we have given those different names.

§ 39. How much the making of species Genera and species are in order to naming. and genera is in order to general names, and how much general names are necessary, if not to the being, yet at least to the completing of a species, and making it pass for such, will appear, besides what has been said above concerning ice and water, in a very familiar example. A silent and a striking watch are but one species to those who have but one name for them: but he that has the name watch for one, and clock for the other, and distinct complex ideas, to which those names belong, to him they are different species. It will be said perhaps that the inward contrivance and constitution is different between these two, which the watch-maker has a clear idea of. And yet, it is plain, they are but one species to him, when he has but one name for them. For what is sufficient in the inward contrivance to make a new species? There are some watches that are made with four wheels, others with five: is this a specific difference to the workman? Some have strings and physies, and others none; some have the balance loose, and others regulated by a spiral spring, and others by hog's bristles: are any or all of these enough to make a specific difference to the workman, that knows each of these, and several other different contrivances in the internal constitutions of watches? It is certain each of these hath a real difference from the rest: but whether it be an essential, a specific difference or no, relates only to the complex idea to which the name watch is given: as long as they all agree in the idea which that name stands for, and that name does not as a generical name comprehend different species

under it, they are not essentially nor specifically different. But if any one will make minuter divisions from differences that he knows in the internal frame of watches, and to such precise complex ideas give names that shall prevail: they will then be new species to them who have those ideas with names to them, and can, by those differences, distinguish watches into these several sorts, and then watch will be a generical name. But yet they would be no distinct species to men ignorant of clock-work and the inward contrivances of watches, who had no other idea but the outward shape and bulk, with the marking of the hours by the hand. For to them all those other names would be but synonymous terms for the same idea, and signify no more, nor no other thing but a watch. Just thus, I think, it is in natural things. Nobody will doubt that the wheels or springs (if I may so say) within, are different in a rational man and a changeling, no more than that there is a difference in the frame between a drill and a changeling. But whether one, or both the differences be essential or specifical, is only to be known to us, by their agreement or disagreement with the complex idea that the name man stands for: for by that alone can it be determined, whether one, or both, or neither of those be a man or no.

Species of artificial things less confused than natural. § 40. From what has been before said, we may see the reason why, in the species of artificial things, there is generally less confusion and uncertainty, than in natural. Because an artificial thing being a production of man, which the artificer designed, and therefore well knows the idea of, the name of it is supposed to stand for no other idea, nor to import any other essence than what is certainly to be known, and easy enough to be apprehended. For the idea or essence of the several sorts of artificial things consisting, for the most part, in nothing but the determinate figure of sensible parts; and sometimes motion depending thereon, which the artificer fashions in matter, such as he finds for his turn; it is not beyond the reach of our faculties to attain a

certain idea thereof, and to settle the signification of the names whereby the species of artificial things are distinguished with less doubt, obscurity, and equivocation, than we can in things natural, whose differences and operations depend upon contrivances beyond the reach of our discoveries.

§ 41. I must be excused here if I think artificial things are of distinct species as well as natural: since I find they are as plainly and orderly ranked into sorts, by different abstract ideas, with general names annexed to them, as distinct one from another as those of natural substances. For why should we not think a watch and pistol, as distinct species one from another, as a horse and a dog, they being expressed in our minds by distinct ideas, and to others by distinct appellations?

Artificial
things of
distinct spe-
cies.

§ 42. This is farther to be observed concerning substances, that they alone of all our several sorts of ideas have particular or proper names, whereby one only particular thing is signified. Because in simple ideas, modes, and relations, it seldom happens that men have occasion to mention often this or that particular when it is absent. Besides, the greatest part of mixed modes, being actions which perish in their birth, are not capable of a lasting duration as substances, which are the actors: and wherein the simple ideas that make up the complex ideas designed by the name, have a lasting union.

Substances
alone have
proper
names.

§ 43. I must beg pardon of my reader, for having dwelt so long upon this subject, and perhaps with some obscurity. But I desire it may be considered how difficult it is to lead another by words into the thoughts of things, stripped of those specifical differences we give them: which things, if I name not, I say nothing; and if I do name them, I thereby rank them into some sort or other, and suggest to the mind the usual abstract idea of that species; and so cross my purpose. For to talk of a man, and to lay by, at the same time,

Difficulty
to treat of
words.

the ordinary signification of the name man, which is our complex idea usually annexed to it; and bid the reader consider man as he is in himself, and as he is really distinguished from others in his internal constitution, or real essence; that is, by something he knows not what; looks like trifling: and yet thus one must do who would speak of the supposed real essences and species of things, as thought to be made by nature, if it be but only to make it understood, that there is no such thing signified by the general names, which substances are called by. But because it is difficult by known familiar names to do this, give me leave to endeavour by an example to make the different consideration the mind has of specific names and ideas a little more clear, and to show how the complex ideas of modes are referred sometimes to archetypes in the minds of other intelligent beings; or, which is the same, to the signification annexed by others to their received names; and sometimes to no archetypes at all. Give me leave also to show how the mind always refers its ideas of substances, either to the substances themselves, or to the signification of their names as to the archetypes; and also to make plain the nature of species, or sorting of things, as apprehended, and made use of by us; and of the essences belonging to those species, which is perhaps of more moment, to discover the extent and certainty of our knowledge, than we at first imagine.

Instances of mixed modes of a grown man, with a good understanding, but in a strange country, with all things new and unknown about him; and no other faculties to attain the knowledge of them, but what one of this age has now. He observes Lamech more melancholy than usual, and imagines it to be from a suspicion he has of his wife Adah (whom he most ardently loved), that she had too much kindness for another man. Adam discourses these his thoughts to Eve, and desires her to take care that Adah commit not folly: and in these discourses with Eve he makes use

of these two new words, kinneah and niouph. In time Adam's mistake appears, for he finds Lamech's trouble proceeded from having killed a man; but yet the two names kinneah and niouph (the one standing for suspicion, in a husband, of his wife's disloyalty to him, and the other for the act of committing disloyalty) lost not their distinct significations. It is plain then that here were two distinct complex ideas of mixed modes with names to them, two distinct species of actions essentially different; I ask wherein consisted the essences of these two distinct species of actions? And it is plain it consisted in a precise combination of simple ideas, different in one from the other. I ask, Whether the complex idea in Adam's mind, which he called kinneah, were adequate or no? And it is plain it was; for it being a combination of simple ideas, which he, without any regard to any archetype, without respect to any thing as a pattern, voluntarily put together, abstracted and gave the name kinneah to, to express in short to others, by that one sound, all the simple ideas contained and united in that complex one; it must necessarily follow, that it was an adequate idea. His own choice having made that combination, it had all in it he intended it should, and so could not but be perfect, could not but be adequate, it being referred to no other archetype which it was supposed to represent.

§ 45. These words, kinneah and niouph, by degrees grew into common use; and then the case was somewhat altered. Adam's children had the same faculties, and thereby the same power that he had to make what complex ideas of mixed modes they pleased in their own minds; to abstract them, and make what sounds they pleased the signs of them: but the use of names being to make our ideas within us known to others, that cannot be done, but when the same sign stands for the same idea in two who would communicate their thoughts and discourse together. Those therefore of Adam's children, that found these two words, kinneah and niouph, in familiar use, could not

take them for insignificant sounds; but must needs conclude, they stood for something, for certain ideas, abstract ideas, they being general names, which abstract ideas were the essences of the species distinguished by those names. If therefore they would use these words, as names of species already established and agreed on, they were obliged to conform the ideas in their minds, signified by these names, to the ideas that they stood for in other men's minds, as to their patterns and archetypes; and then indeed their ideas of these complex modes were liable to be inadequate, as being very apt (especially those that consisted of combinations of many simple ideas) not to be exactly conformable to the ideas in other men's minds, using the same names; though for this there be usually a remedy at hand, which is to ask the meaning of any word we understand not, of him that uses it: it being as impossible to know certainly what the words jealousy and adultery (which I think answer קנאה and נאוף) stand for in another man's mind, with whom I would discourse about them, as it was impossible, in the beginning of language, to know what kinneah and niouph stood for in another man's mind, without explication, they being voluntary signs in every one.

Instance of substances in zahab. § 46. Let us now also consider, after the same manner, the names of substances in their first application. One of Adam's children, roving in the mountains, lights on a glittering substance which pleases his eye; home he carries it to Adam, who upon consideration of it, finds it to be hard, to have a bright yellow colour, and an exceeding great weight. These, perhaps, at first, are all the qualities he takes notice of in it; and abstracting this complex idea, consisting of a substance having that peculiar bright yellowness, and a weight very great in proportion to its bulk, he gives it the name zahab, to denominate and mark all substances that have these sensible qualities in them. It is evident now that, in this case, Adam acts quite differently from what he did before in forming those ideas of

mixed modes, to which he gave the names kinneah and niouph. For there he puts ideas together, only by his own imagination, not taken from the existence of any thing; and to them he gave names to denominate all things that should happen to agree to those his abstract ideas, without considering whether any such thing did exist or no; the standard there was of his own making. But in the forming his idea of this new substance, he takes the quite contrary course; here he has a standard made by nature; and therefore being to represent that to himself, by the idea he has of it, even when it is absent, he puts in no simple idea into his complex one, but what he has the perception of from the thing itself. He takes care that his idea be conformable to this archetype, and intends the name should stand for an idea so conformable.

§ 47. This piece of matter, thus denominated zahab by Adam, being quite different from any he had seen before, nobody, I think, will deny to be a distinct species, and to have its peculiar essence; and that the name zahab is the mark of the species, and a name belonging to all things partaking in that essence. But here it is plain, the essence, Adam made the name zahab stand for, was nothing but a body hard, shining, yellow, and very heavy. But the inquisitive mind of man, not content with the knowledge of these, as I may say, superficial qualities, puts Adam on farther examination of this matter. He therefore knocks and beats it with flints, to see what was discoverable in the inside: he finds it yield to blows, but not easily separate into pieces: he finds it will bend without breaking. Is not now ductility to be added to his former idea, and made part of the essence of the species that name zahab stands for? Farther trials discover fusibility and fixedness. Are not they also, by the same reason that any of the others were, to be put into the complex idea signified by the name zahab? If not, what reason will there be shown more for the one than the other? If these must, then all the other properties, which any farther trials shall discover in this matter, ought by the same reason to make a part of the ingre-

dients of the complex idea which the name *zahab* stands for, and so be the essence of the species marked by that name. Which properties, because they are endless, it is plain, that the idea made after this fashion by this archetype, will be always inadequate.

§ 48. But this is not all, it would also follow, that the names of substances would not only have (as in truth they have) but would also be supposed to have, different significations, as used by different men, which would very much cumber the use of language. For if every distinct quality, that were discovered in any matter by any one, were supposed to make a necessary part of the complex idea, signified by the common name given it, it must follow, that men must suppose the same word to signify different things in different men; since they cannot doubt but different men may have discovered several qualities in substances of the same denomination, which others know nothing of.

§ 49. To avoid this, therefore, they have supposed a real essence belonging to every species, from which these properties all flow, and would have their name of the species stand for that. But they not having any idea of that real essence in substances, and their words signifying nothing but the ideas they have; that which is done by this attempt, is only to put the name or sound in the place and stead of the thing having that real essence, without knowing what the real essence is: and this is that which men do, when they speak of species of things, as supposing them made by nature, and distinguished by real essences.

§ 50. For let us consider, when we affirm, that all gold is fixed, either it means that fixedness is a part of the definition, part of the nominal essence the word gold stands for; and so this affirmation, all gold is fixed, contains nothing but the signification of the term gold. Or else it means, that fixedness, not being a part of the definition of the gold, is a property of that sub-

stance itself: in which case, it is plain, that the word gold stands in the place of a substance, having the real essence of a species of things made by nature. In which way of substitution it has so confused and uncertain a signification, that though this proposition, gold is fixed, be in that sense an affirmation of something real, yet it is a truth will always fail us in its particular application, and so is of no real use nor certainty. For let it be ever so true, that all gold, i. e. all that has the real essence of gold, is fixed, what serves this for, whilst we know not in this sense what is or is not gold? For if we know not the real essence of gold, it is impossible we should know what parcel of matter has that essence, and so whether it be true gold or no.

§ 51. To conclude: what liberty Adam Conclusion. had at first to make any complex ideas of mixed modes, by no other patterns but his own thought, the same have all men ever since had. And the same necessity of conforming his ideas of substances to things without him, as to archetypes made by nature, that Adam was under, if he would not wilfully impose upon himself; the same are all men ever since under too. The same liberty also that Adam had of affixing any new name to any idea, the same has any one still (especially the beginners of languages, if we can imagine any such), but only with this difference, that in places where men in society have already established a language amongst them, the significations of words are very warily and sparingly to be altered: because men being furnished already with names for their ideas, and common use having appropriated known names to certain ideas, an affected misapplication of them cannot but be very ridiculous. He that hath new notions, will, perhaps, venture sometimes on the coining of new terms to express them; but men think it a boldness, and it is uncertain whether common use will ever make them pass for current. But in communication with others, it is necessary, that we conform the ideas we make the vulgar

words of any language stand for to their known proper significations (which I have explained at large already) or else to make known that new signification we apply them to.

END OF THE FIRST VOLUME.

